Guinea

```
## [1] "Census Females"
```

```
## # A tibble: 18 x 3
##    aggr.age  `1996`  `2014`
##  *    <dbl>   <dbl>   <dbl>
##  1        0 629099  874110
##  2        5 545591. 788987
##  3       10 417300  660467
##  4       15 335618. 570344
##  5       20 307902. 506494.
##  6       25 288558. 434907
##  7       30 248041  359231.
##  8       35 198157. 290111.
##  9       40 156056. 231976.
## 10       45 121375. 181720.
## 11       50  96060. 142381.
## 12       55  80310. 111180.
## 13       60  72839.  88693
## 14       65  59296   69474.
## 15       70  47005   52244.
## 16       75  62565   36503.
## 17       80     NA   23117.
## 18       85     NA   25432
```

```
## [1] "Census Males"
```

```
## # A tibble: 18 x 3
##    aggr.age  `1996`  `2014`
##  *    <dbl>   <dbl>   <dbl>
##  1        0 643728  890034
##  2        5 573860. 810744.
##  3       10 440982. 659194.
##  4       15 320036. 519244.
##  5       20 255442  419369
##  6       25 224650. 340730.
##  7       30 197222. 279970.
##  8       35 171459. 233115.
##  9       40 147724. 197034
## 10       45 119655. 166446.
## 11       50  95200. 141578.
## 12       55  79656. 120187.
## 13       60  69800.  98373.
## 14       65  56828.  74596.
## 15       70  40047   53927.
## 16       75  63801   37345
## 17       80     NA   23516
## 18       85     NA   24319.
```

Thiele Normal Hump

```
##    user  system elapsed
##   75.01    0.70   76.33
```

```
## [1] "relative convergence (4)"
```

Thiele log-Normal Hump

```
##    user  system elapsed
##   83.26    0.79   84.76
```

```
## [1] "relative convergence (4)"
```

Thiele Normal Hump (Pop 5-9 to 70-74, DHS 15-19 to 45-49)

```
##    user  system elapsed
##   72.42    0.56   73.68
```

```
## [1] "relative convergence (4)"
```

Thiele log-Normal Hump (Pop 5-9 to 70-74, DHS 15-19 to 45-49)

```
##    user  system elapsed
##   78.91    0.66   80.30
```

```
## [1] "relative convergence (4)"
```

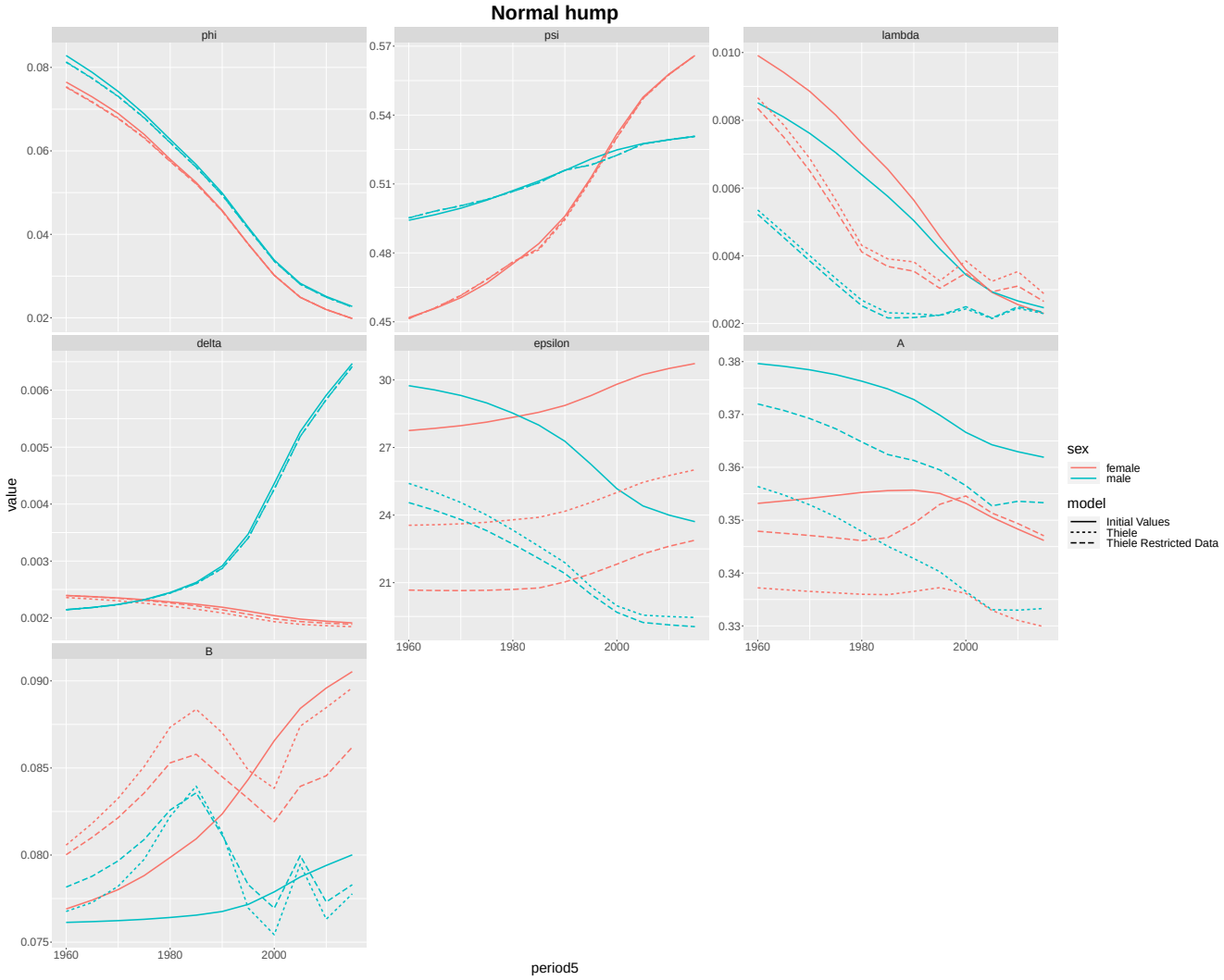

Figure 1: Estimated parameters

```
## Using Sex as id variables
## Using Sex as id variables
## Warning: Removed 8 rows containing missing values (geom_point).
## Warning: Removed 8 rows containing missing values (geom_point).
## Warning: Removed 8 rows containing missing values (geom_point).
## Warning: Removed 8 rows containing missing values (geom_point).
## Warning: Removed 8 rows containing missing values (geom_point).
```

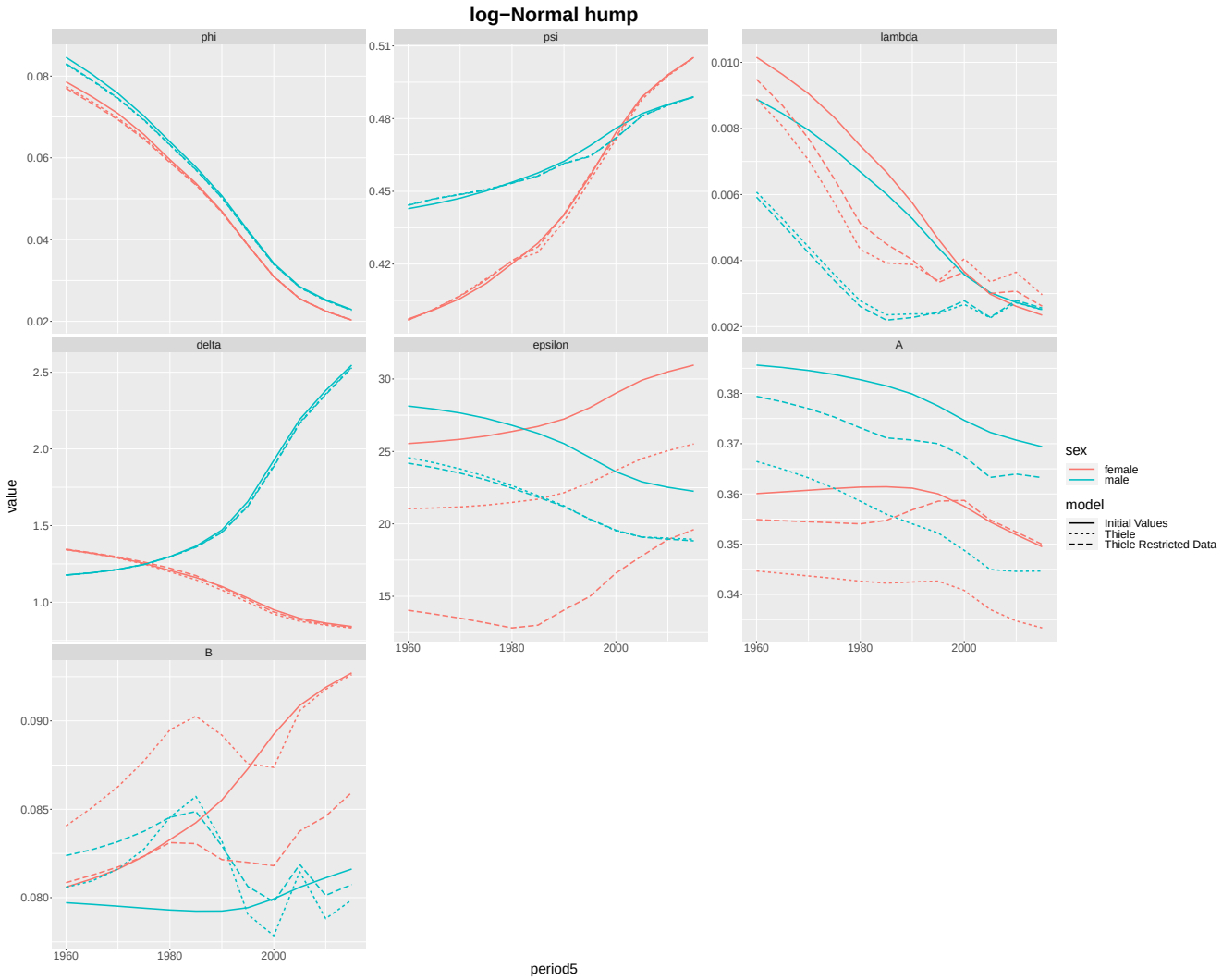

Figure 2: Estimated parameters

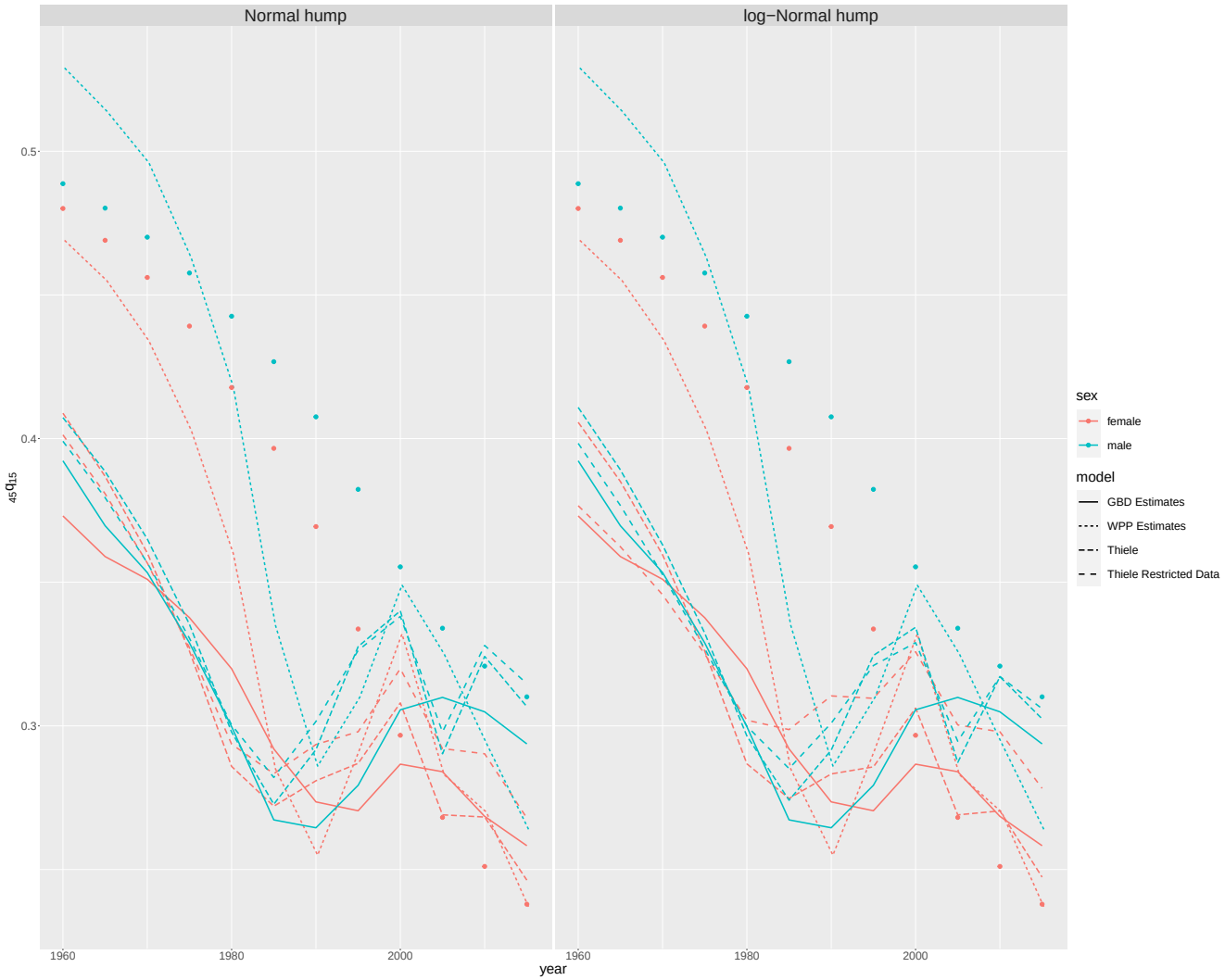

Figure 3: Estimated ${}_{45}q_{15}$

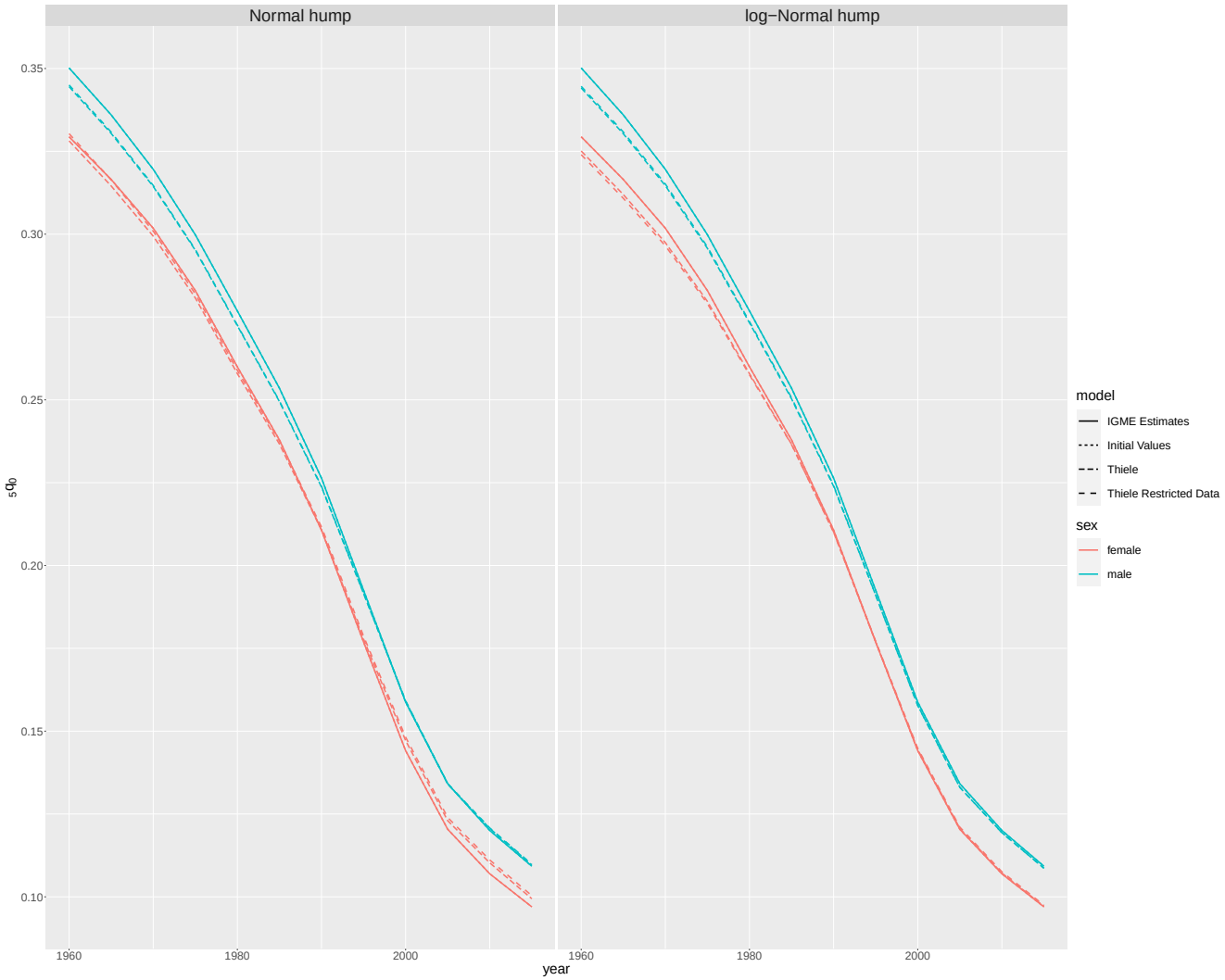

Figure 4: Estimated ${}_5q_0$

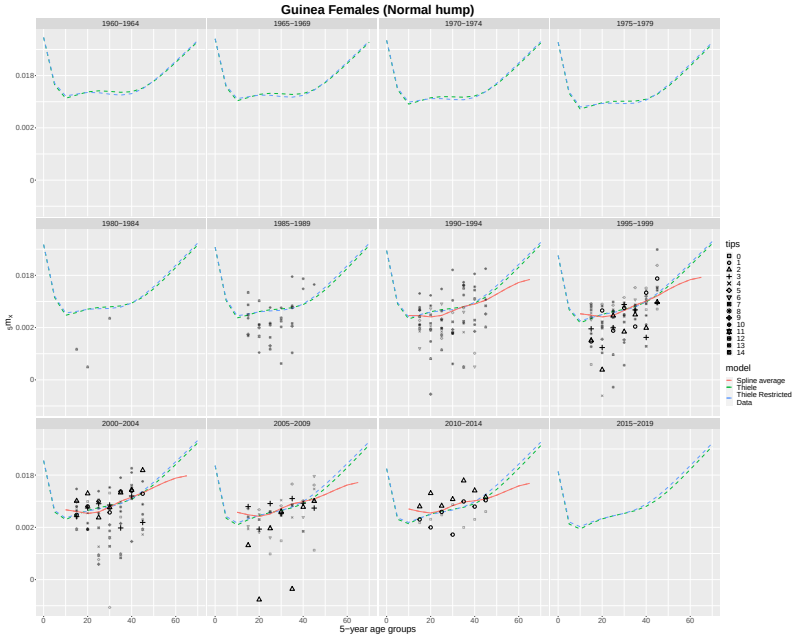

Figure 5: Mortality Schedules

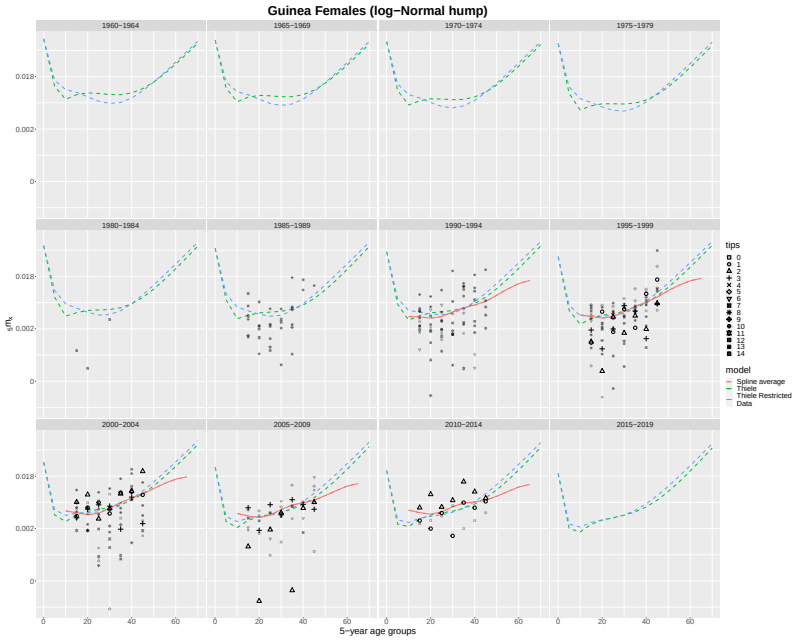

Figure 6: Mortality Schedules

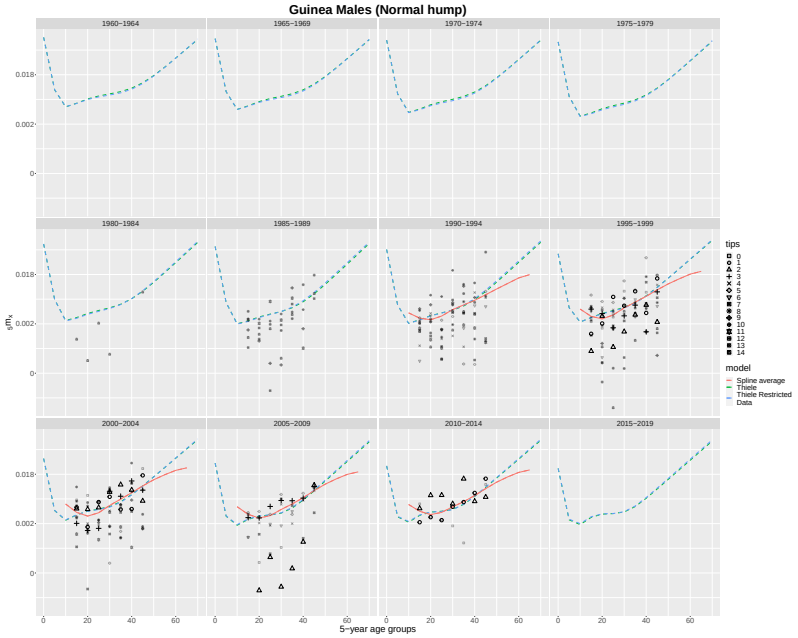

Figure 7: Mortality Schedules

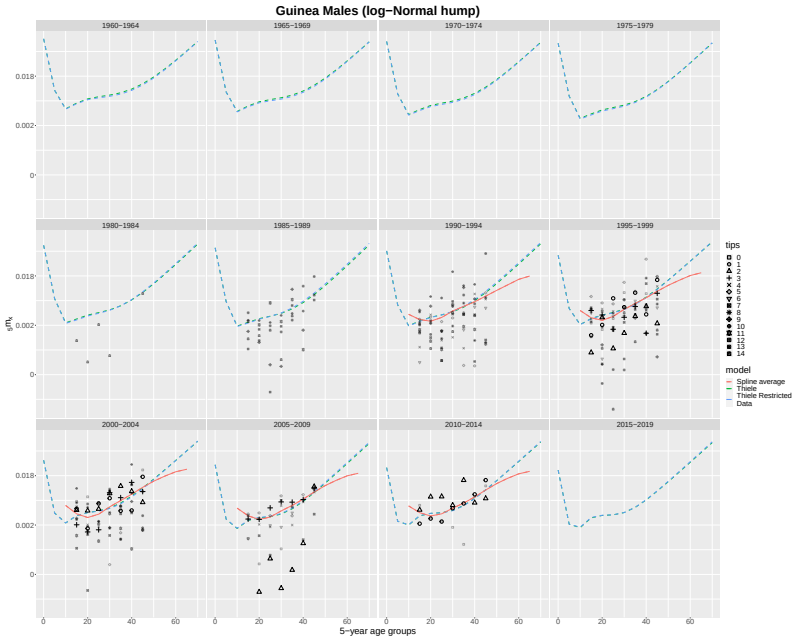

Figure 8: Mortality Schedules

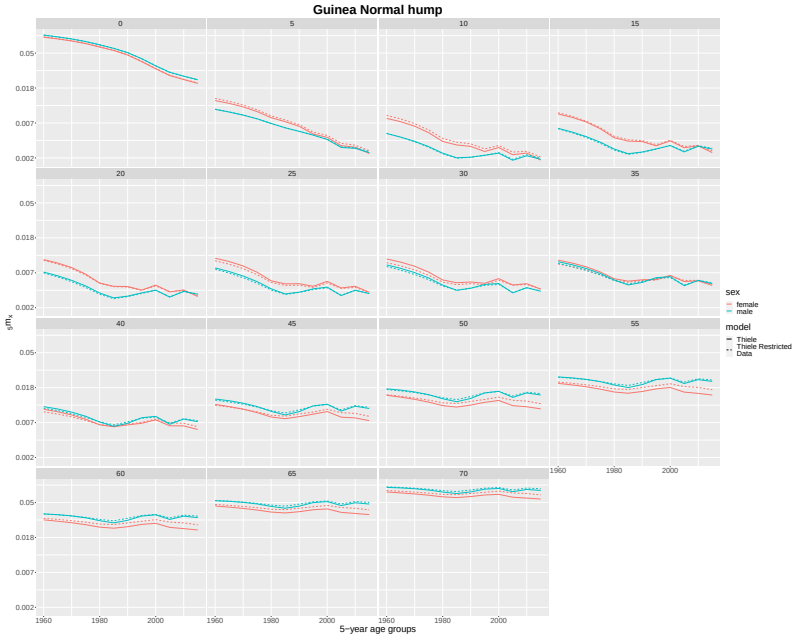

Figure 9: Mortality Schedules

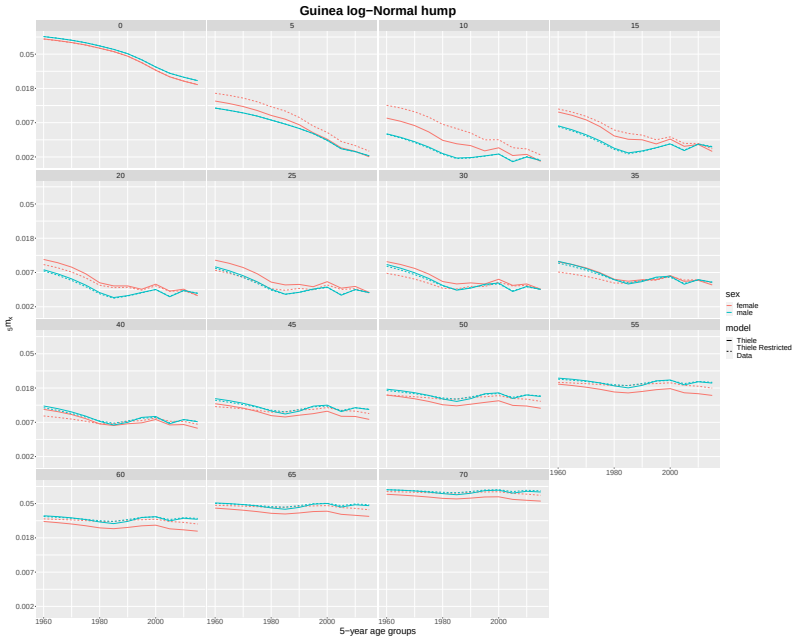

Figure 10: Mortality Schedules

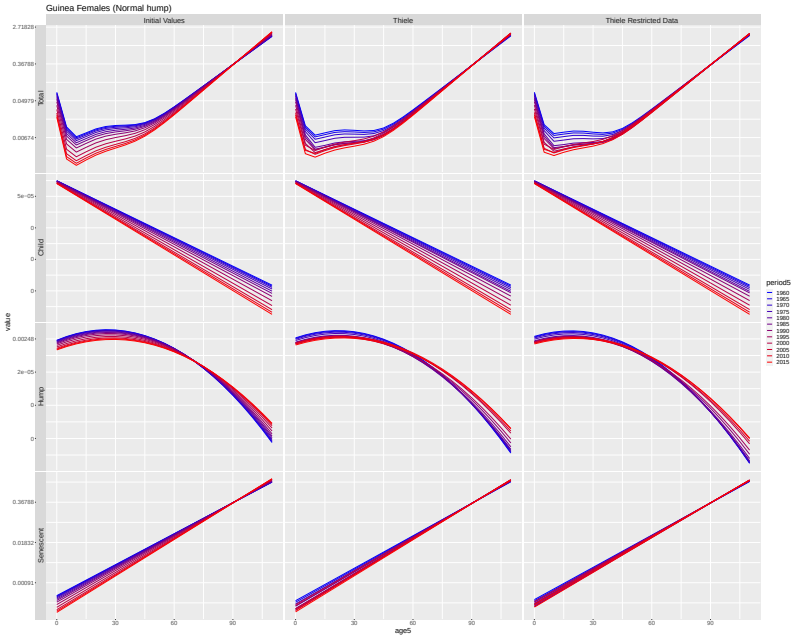

Figure 11: Thiele Decomposed

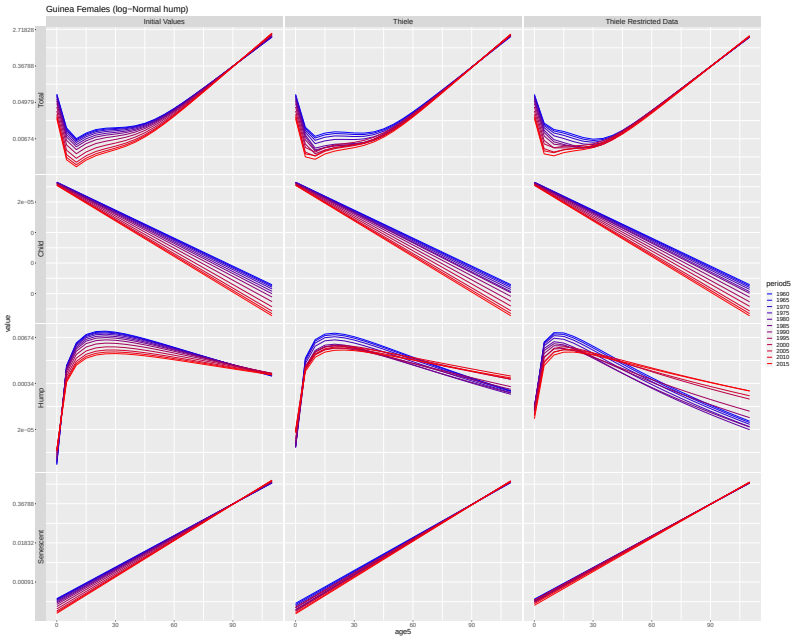

Figure 12: Thiele Decomposed

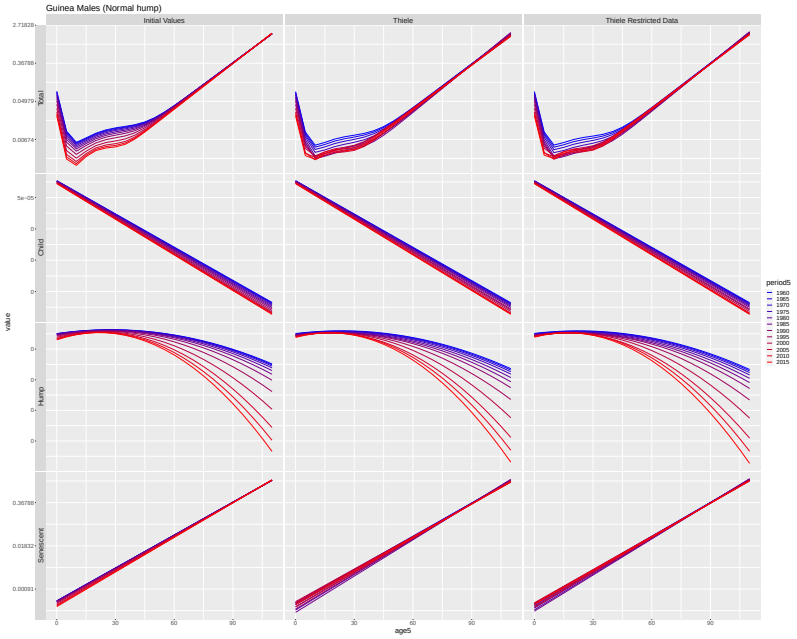

Figure 13: Thiele Decomposed

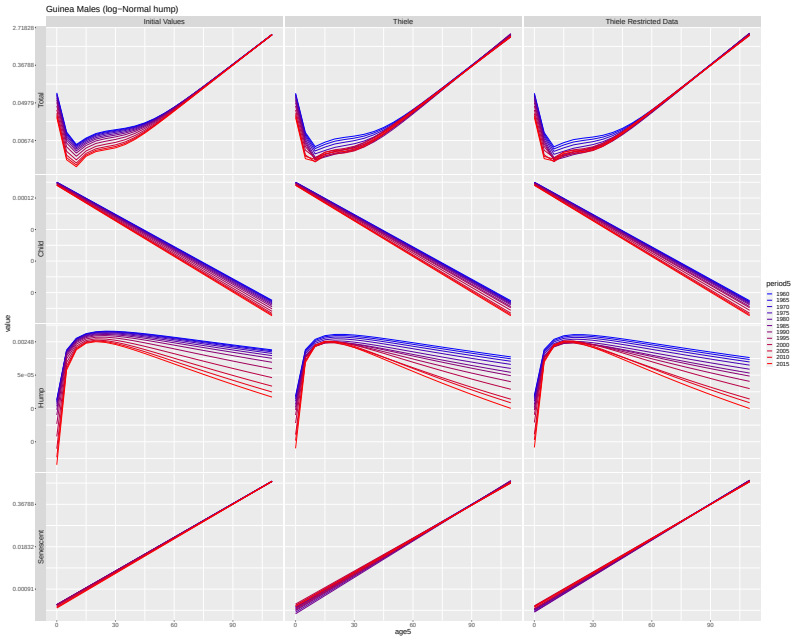

Figure 14: Thiele Decomposed

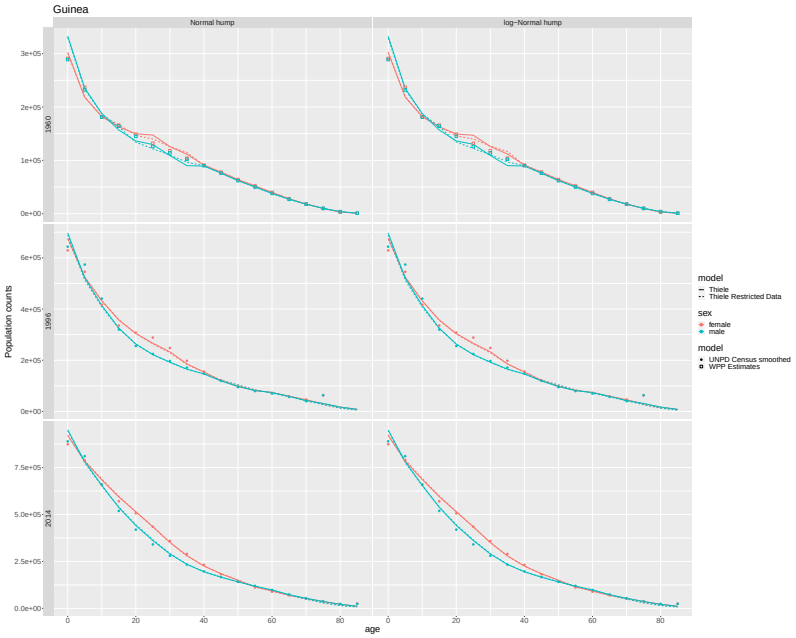

Figure 15: Population

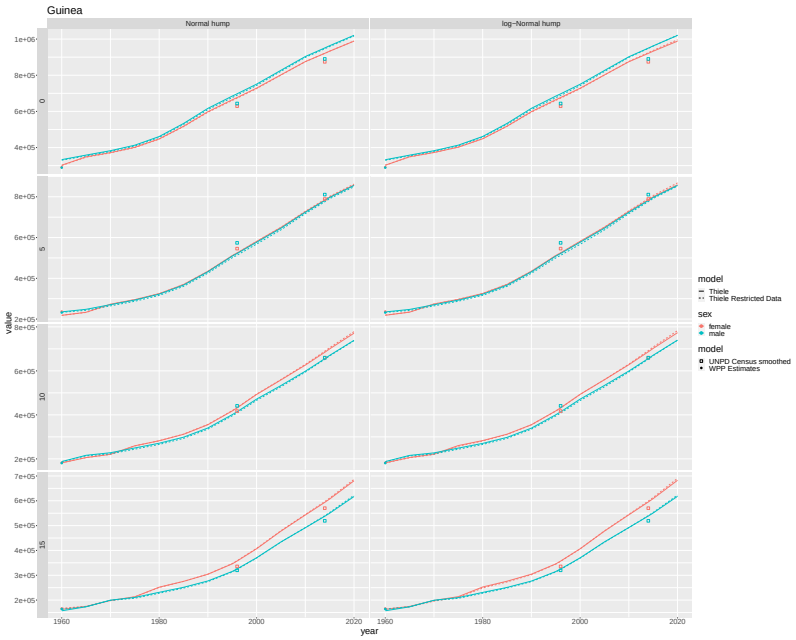

Figure 16: Population

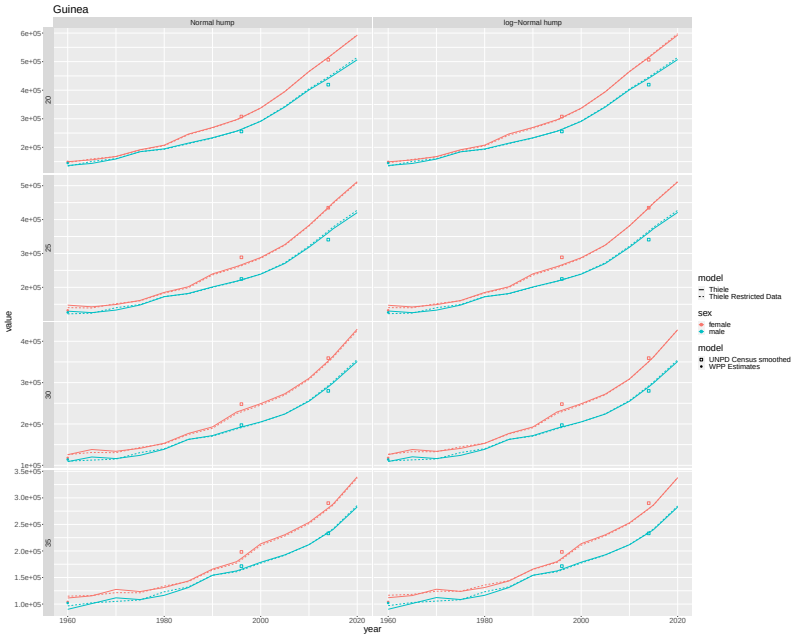

Figure 17: Population

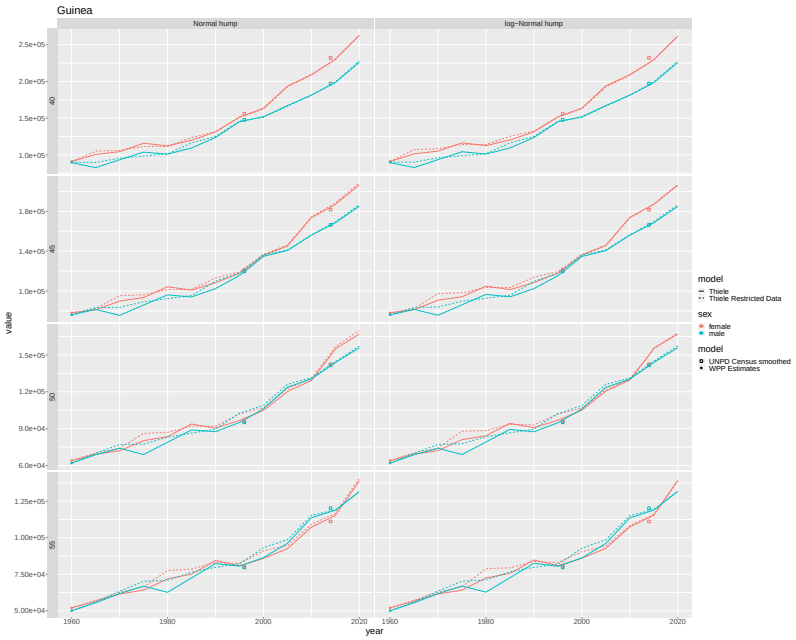

Figure 18: Population

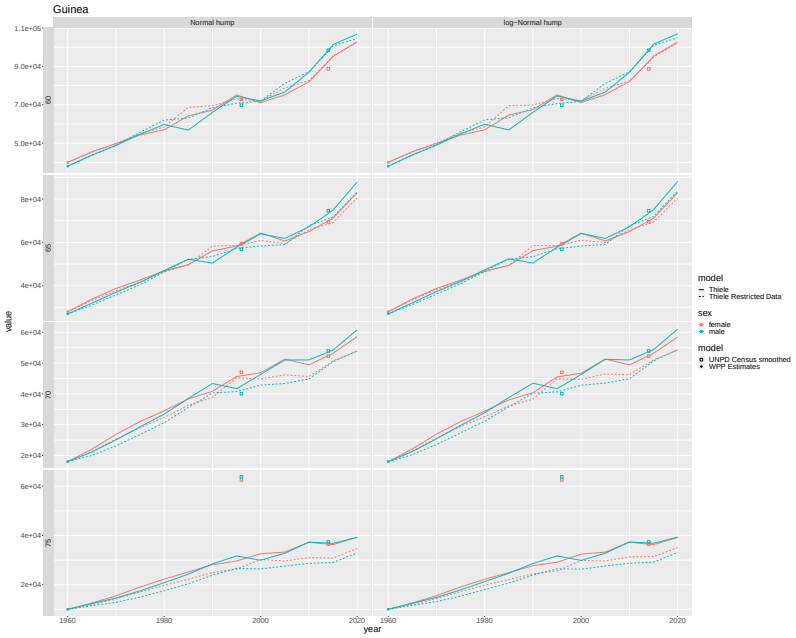

Figure 19: Population

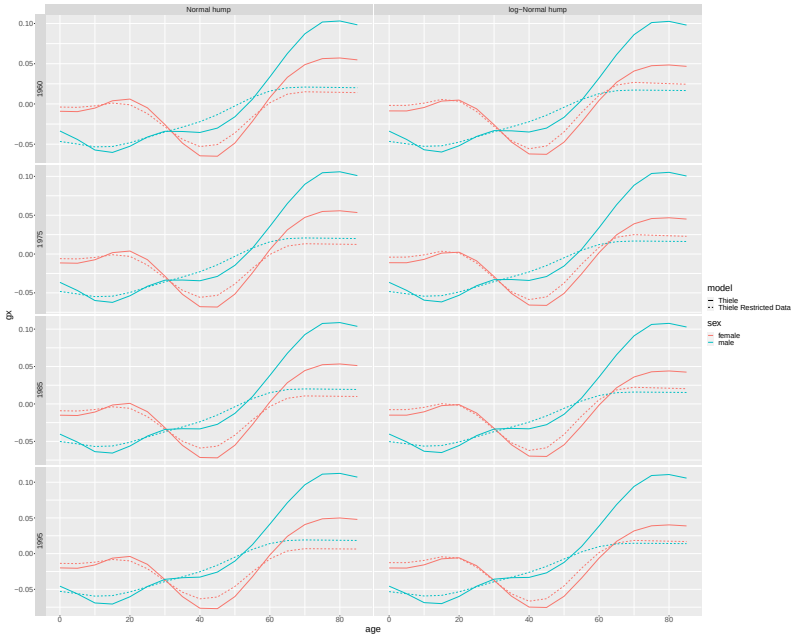

Figure 20: Migration

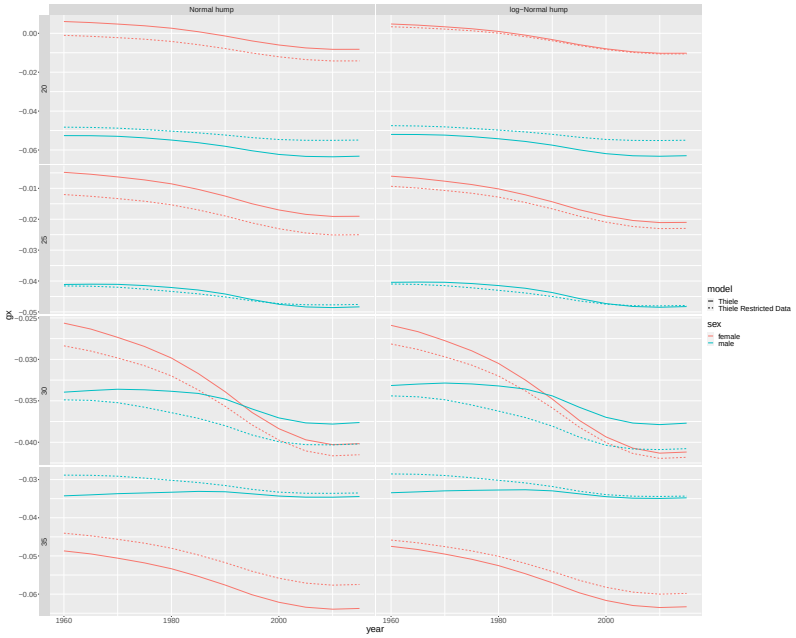

Figure 21: Migration

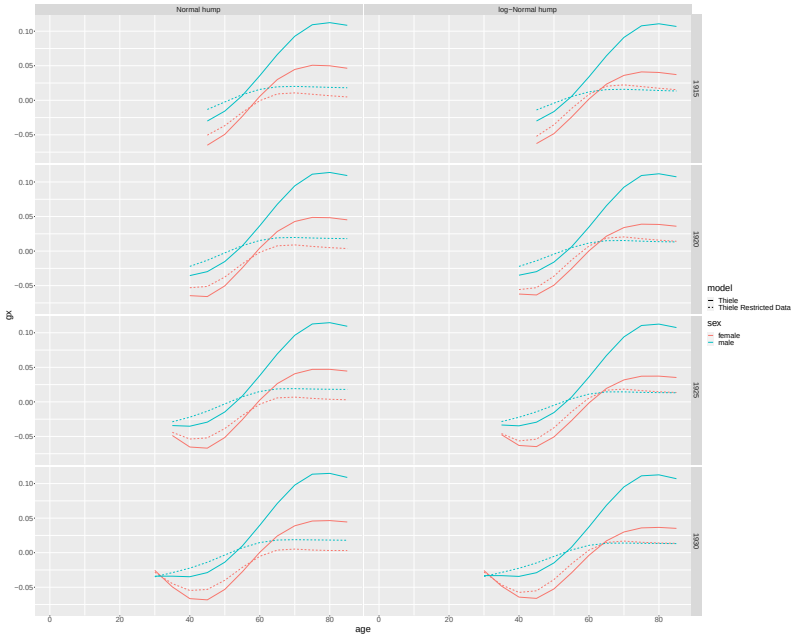

Figure 22: Migration

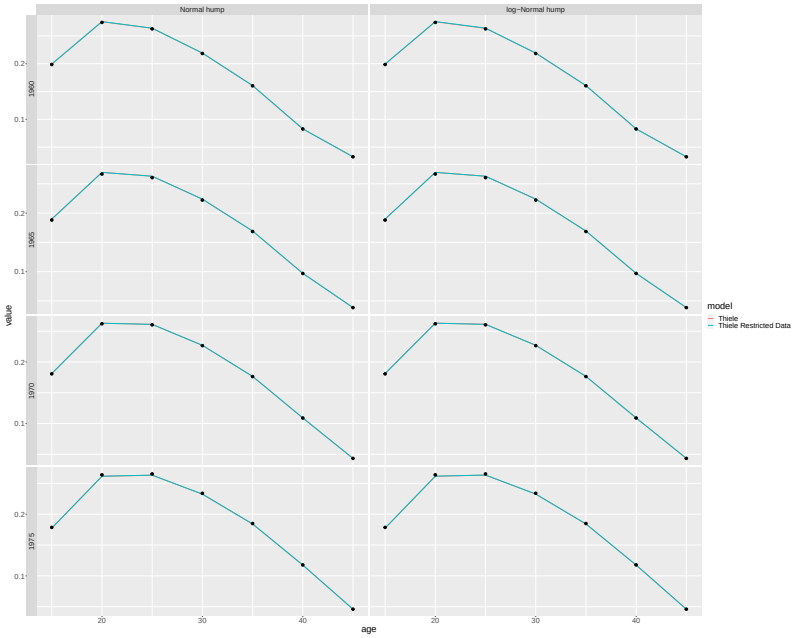

Figure 23: Fertility

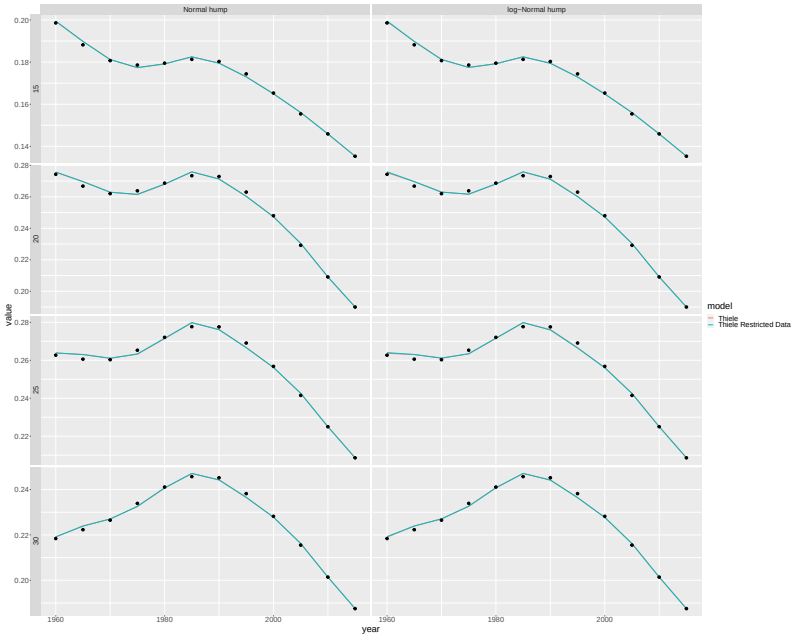

Figure 24: Fertility