Burkina Faso

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

## # A tibble: 18 x 5
##    aggr.age  `1975`   `1985`   `1996`    `2006`
##    *   <dbl>   <dbl>    <dbl>    <dbl>     <dbl>
## 1         0 479362.  730674.  878880  1213119.
## 2         5 417499.  655082.  829526  1088934.
## 3        10 327051.  501749.  692800.  904373.
## 4        15 262454.  384257.  548244   762122.
## 5        20 237211.  330693.  446104.  662654.
## 6        25 221469.  287343.  378176.  555137.
## 7        30 189966.  240637.  322164.  448084.
## 8        35 154009.  202338.  265959.  363978.
## 9        40 126640.  172337.  215769.  299080.
## 10       45 103550.  145369.  175666.  240632.
## 11       50  83233.  120961.  144223.  190845.
## 12       55  63930.  100543.  116654.  151585.
## 13       60  48696.   83755.   94266.  120665.
## 14       65  35645.   63754.   73728.   92136.
## 15       70  25876.   44256.   54514.   67405.
## 16       75  17660.   23964.   35828.   45489.
## 17       80  10821.   41087.   20043.   27411.
## 18       85  13098.      NA    47060.   30478.

## [1] "Census Males"

## # A tibble: 18 x 5
##    aggr.age  `1975`   `1985`   `1996`    `2006`
##    *   <dbl>   <dbl>    <dbl>    <dbl>     <dbl>
## 1         0 498118.  733218.  889544  1236779.
## 2         5 454940.  669057.  855549  1126534.
## 3        10 367257.  523028.  715078.  926371.
## 4        15 275547.  382357.  528713.  716367.
## 5        20 209858.  280615.  374910.  557683.
## 6        25 175866.  213548.  290199.  449918.
## 7        30 155352.  179190.  247737   370217.
## 8        35 135026.  156844.  208632.  304022.
## 9        40 116652.  138100.  174343.  249630.
## 10       45 101729.  123349.  147644.  202625.
## 11       50  88268.  108827.  125516.  165785.
## 12       55  72765.   93619.  106586.  136170.
## 13       60  56927.   78774.   89198.  109332.
## 14       65  41731.   60247.   70396.   84418.
## 15       70  30718.   40187.   51780.   61603.
## 16       75  20445.   21680.   33238.   40173.
## 17       80  10919.   27286.   17172.   22717.
## 18       85  16960.      NA    38154.   20701.
```

Thiele Normal Hump

```
##    user  system elapsed
##   65.78    0.61   66.86
```

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

Thiele log-Normal Hump

```
##    user  system elapsed
##   71.44    0.76   72.84
```

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

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

```
##    user  system elapsed
##   71.56    0.65   72.64
```

```
## [1] "relative convergence (4)"
```
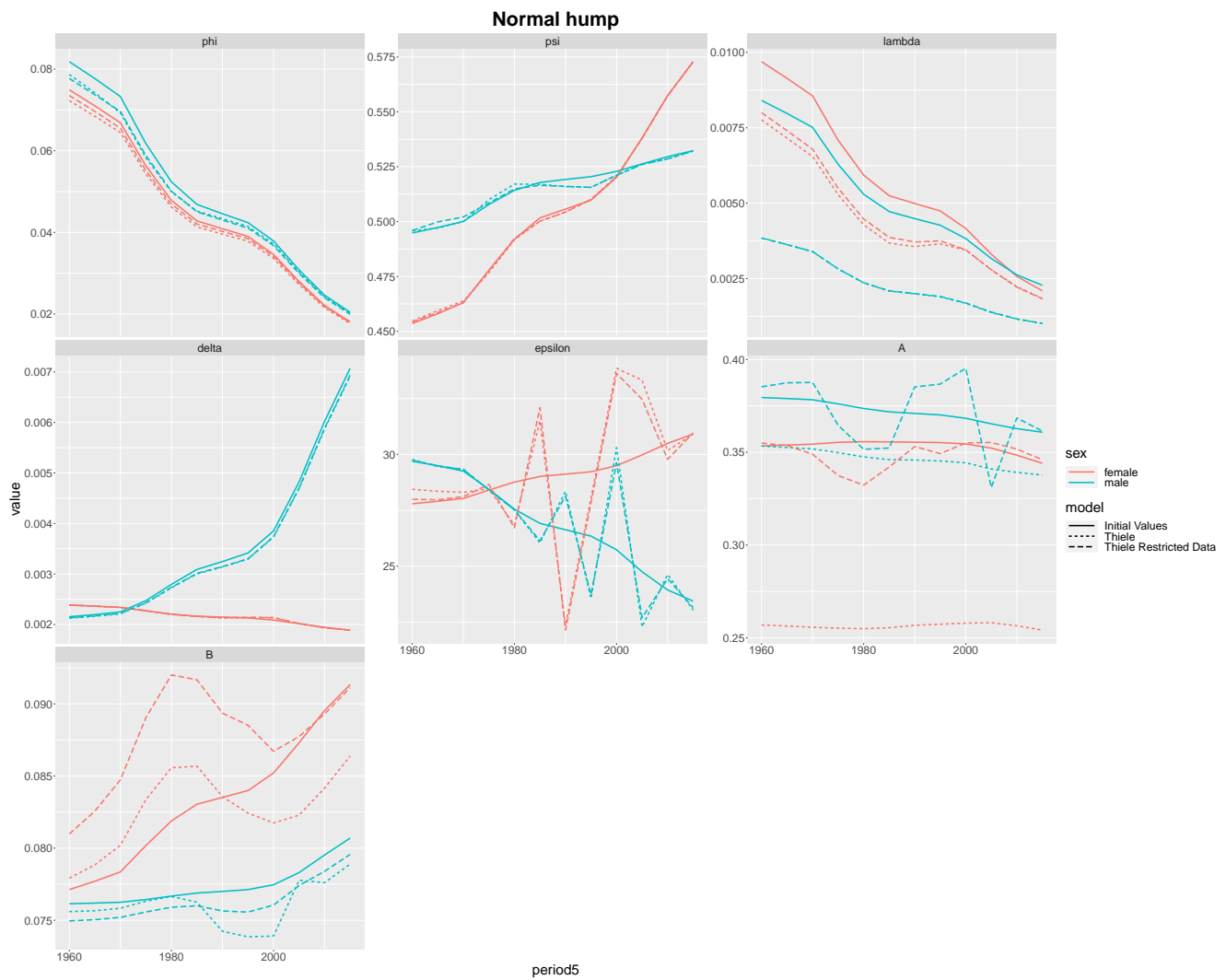
Thiele log-Normal Hump (Pop 5-9 to 70-74, DHS 15-19 to 45-49)

```
##    user  system elapsed
##   71.81    0.62   72.94
```

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

Figure 1: Estimated parameters

```
## Using Sex as id variables
## Using Sex as id variables

## Warning: Removed 4 rows containing missing values (geom_point).

## Warning: Removed 4 rows containing missing values (geom_point).

## Warning: Removed 4 rows containing missing values (geom_point).

## Warning: Removed 4 rows containing missing values (geom_point).

## Warning: Removed 4 rows containing missing values (geom_point).
```

Figure 2: Estimated parameters

Figure 3: Estimated $_{45}q_{15}$
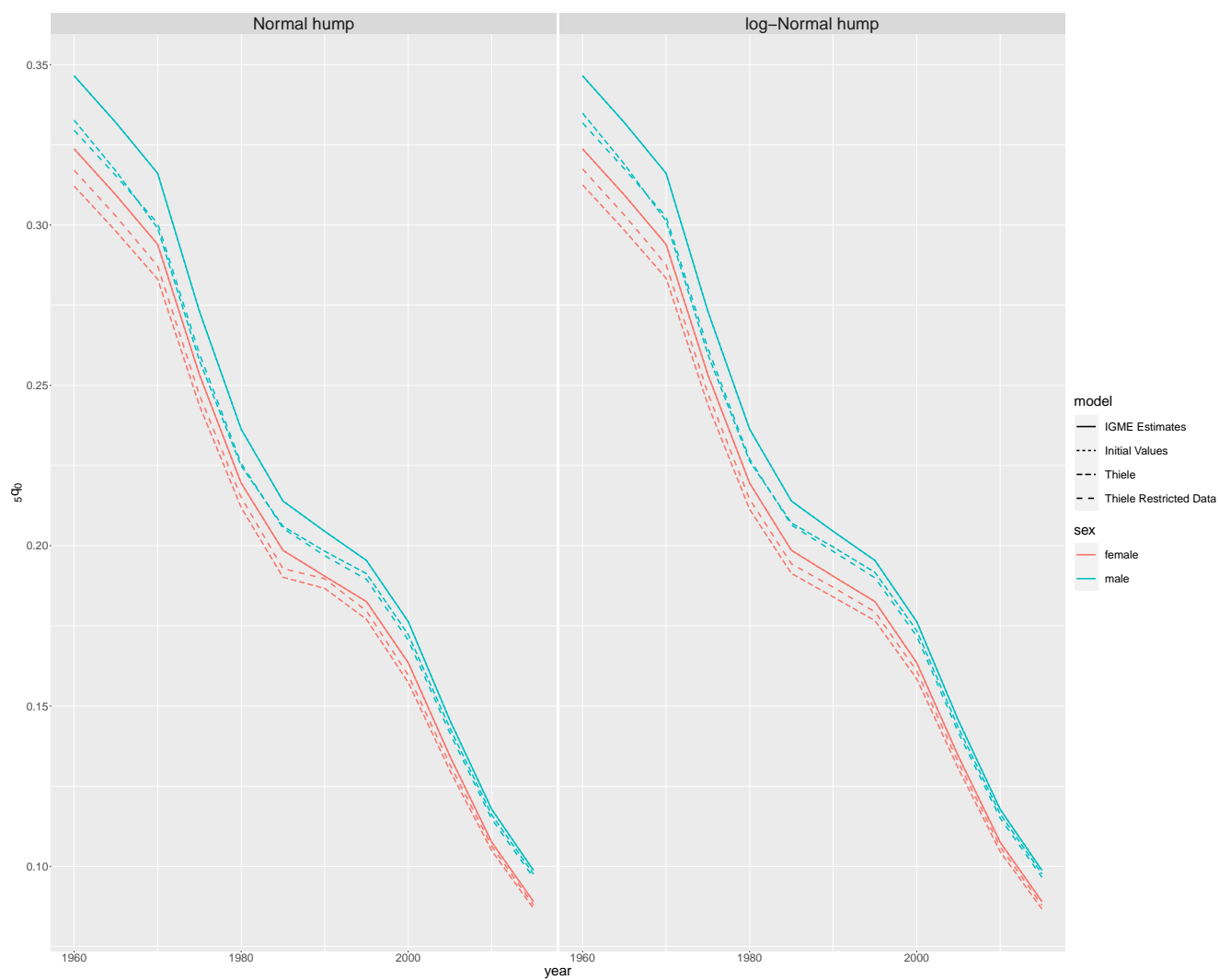
Figure 4: Estimated $_5q_0$
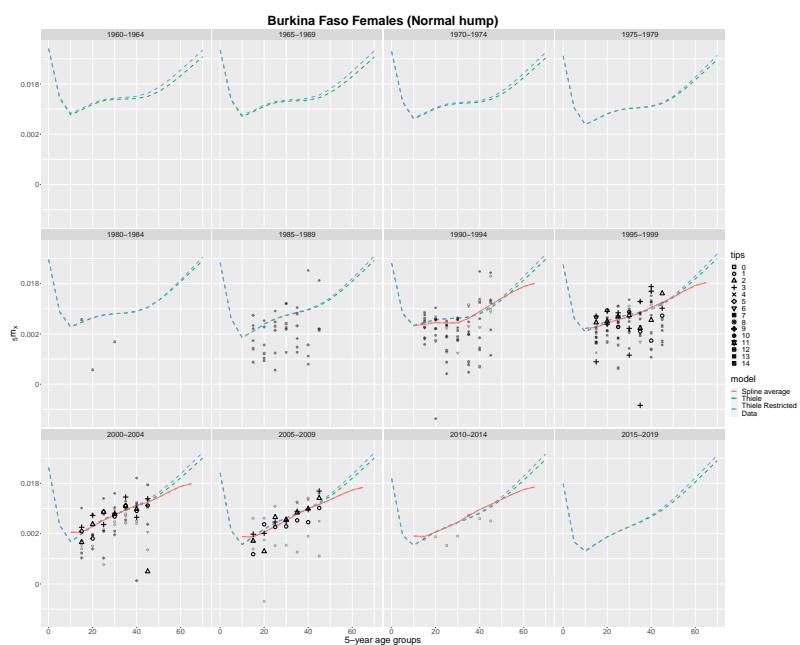
Figure 5: Mortality Schedules
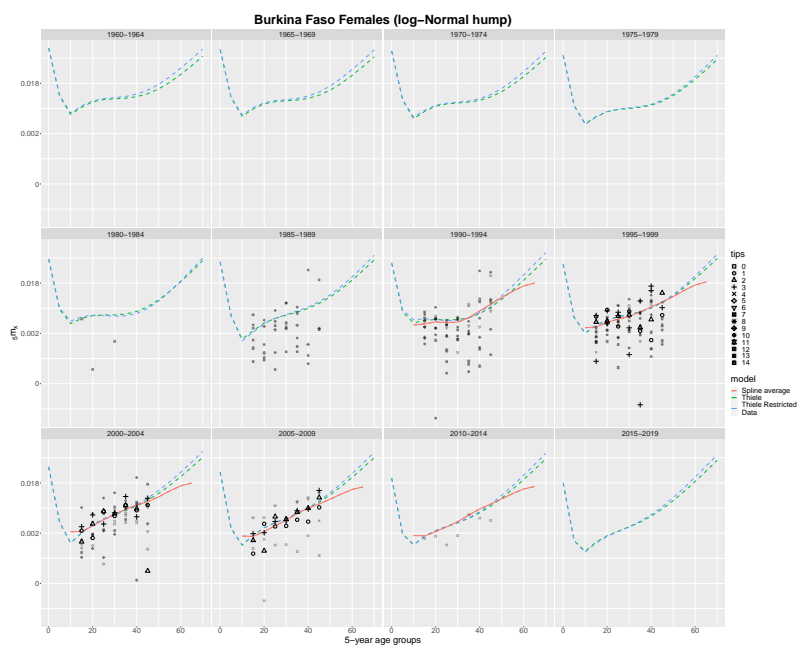
Figure 6: Mortality Schedules
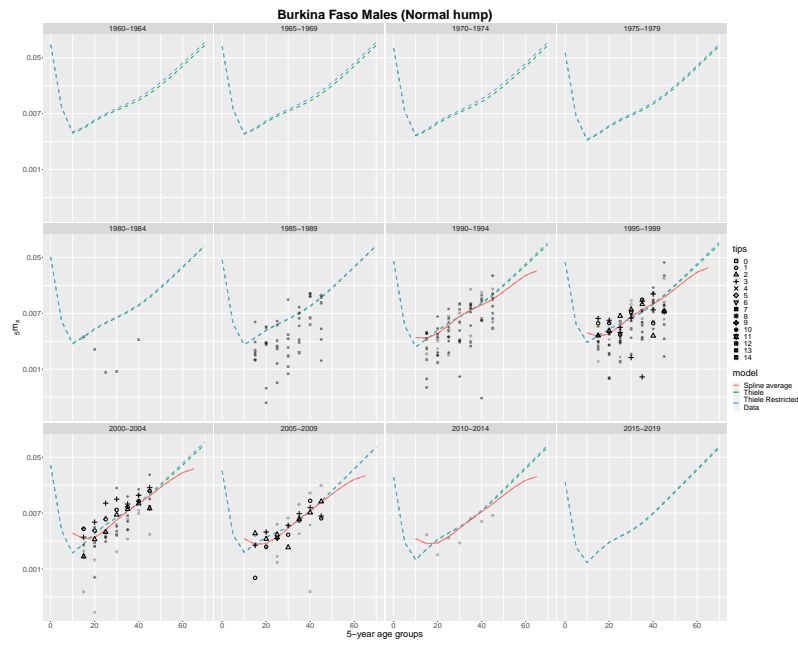
Figure 7: Mortality Schedules
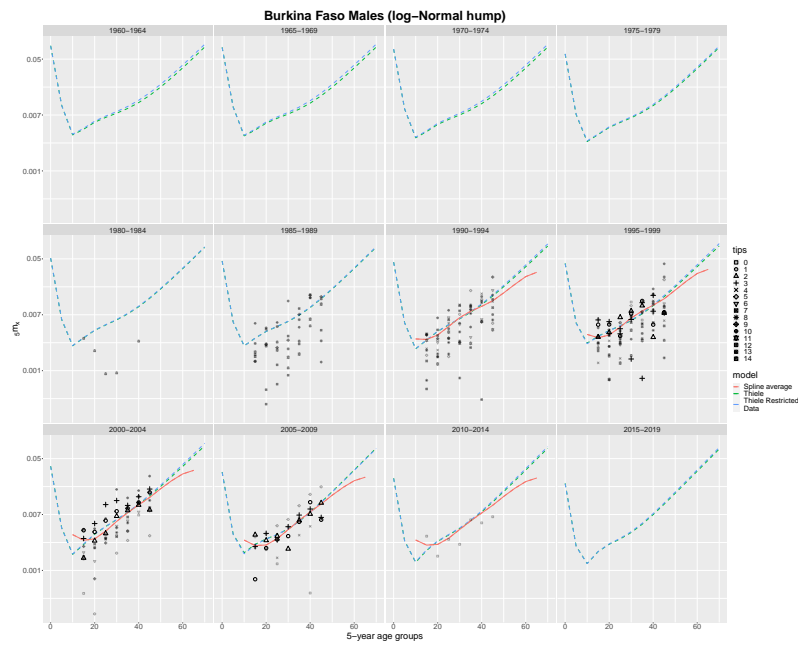
Figure 8: Mortality Schedules
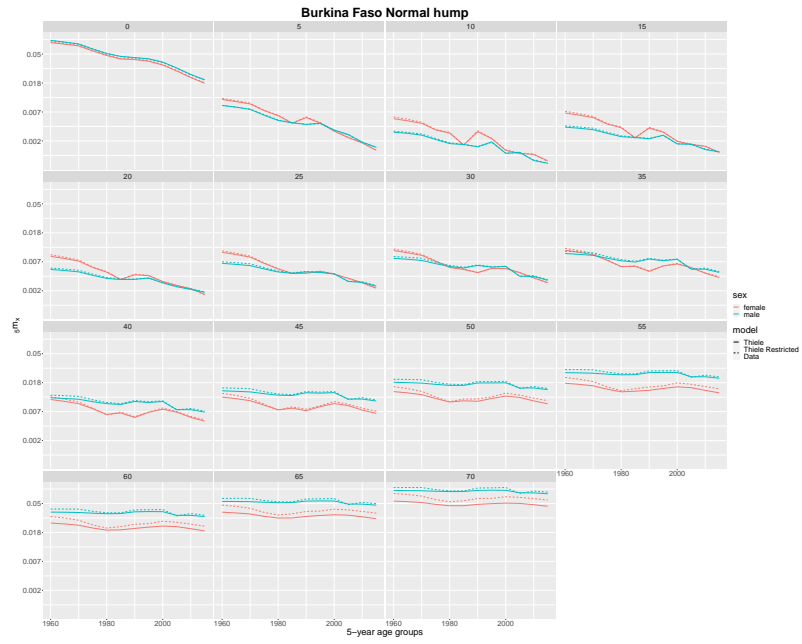
Figure 9: Mortality Schedules
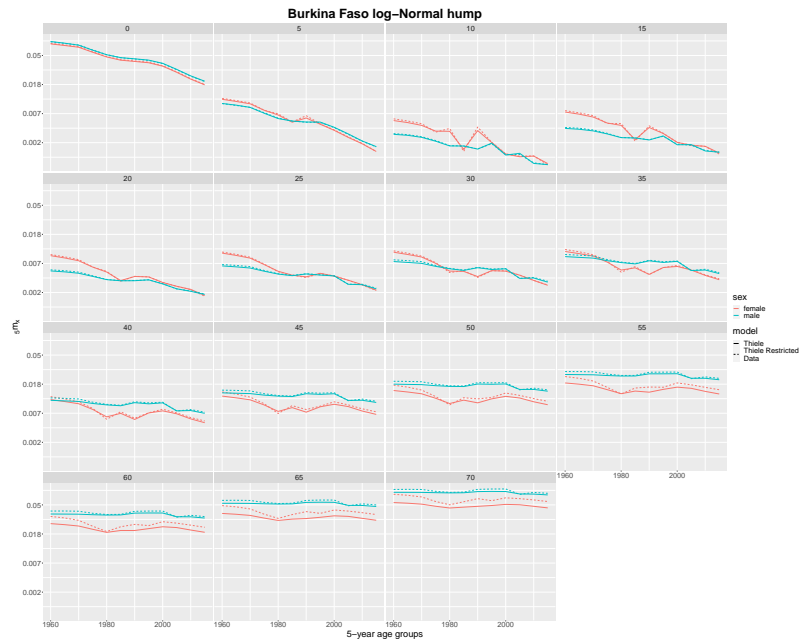
Figure 10: Mortality Schedules

9
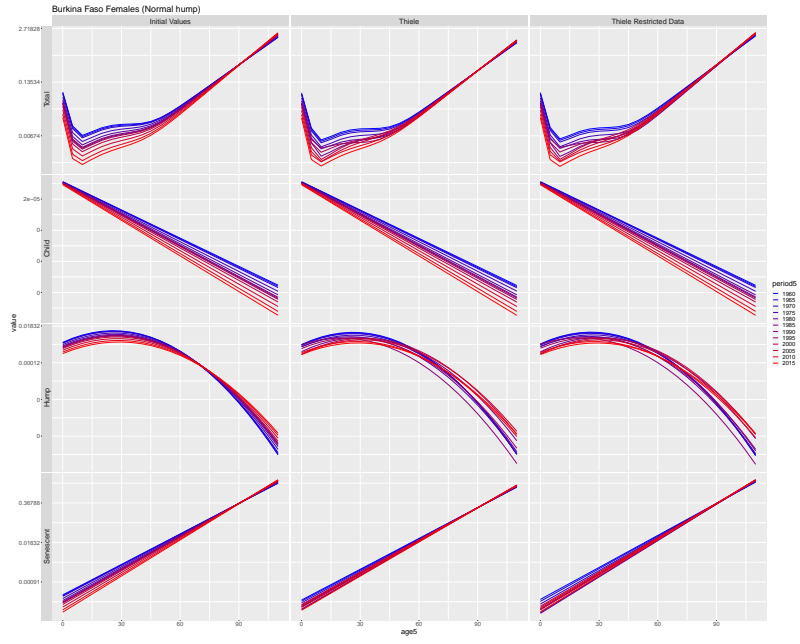
Figure 11: Thiele Decomposed
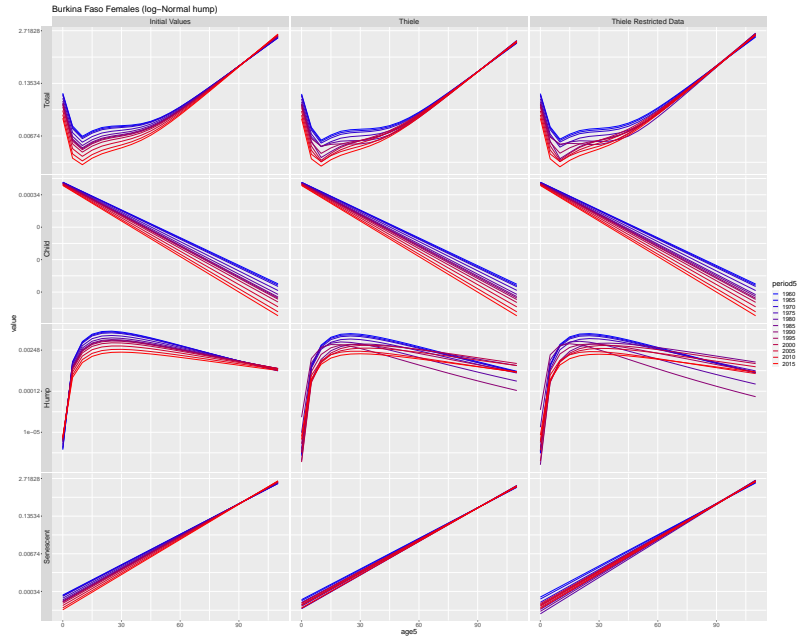
Figure 12: Thiele Decomposed
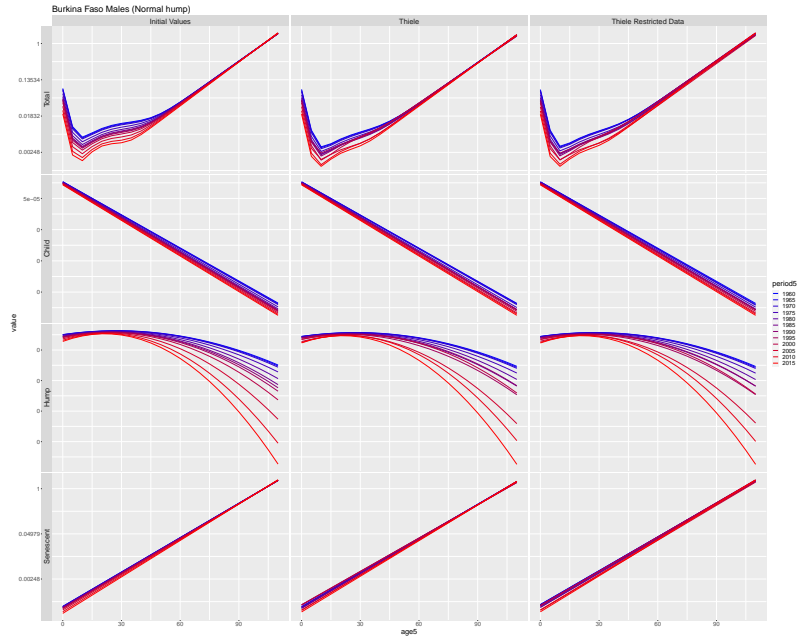
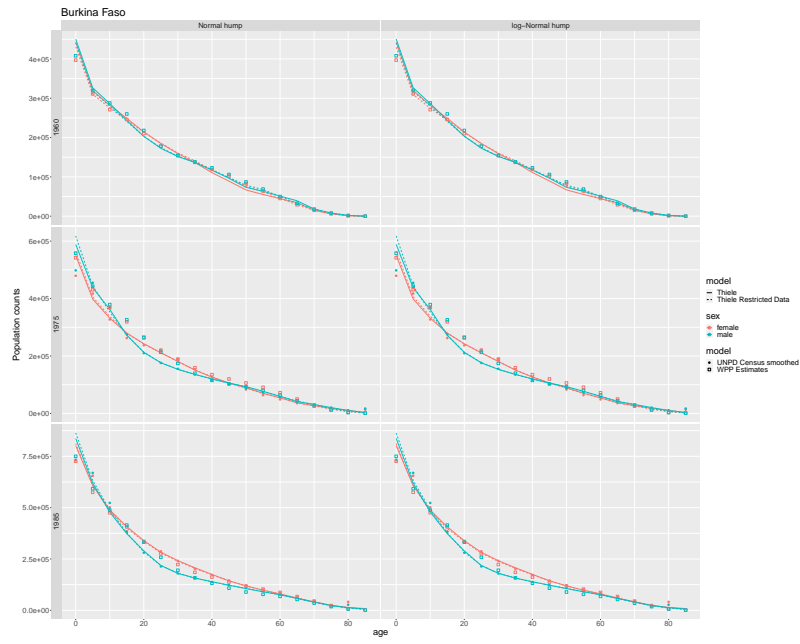Figure 13: Thiele Decomposed
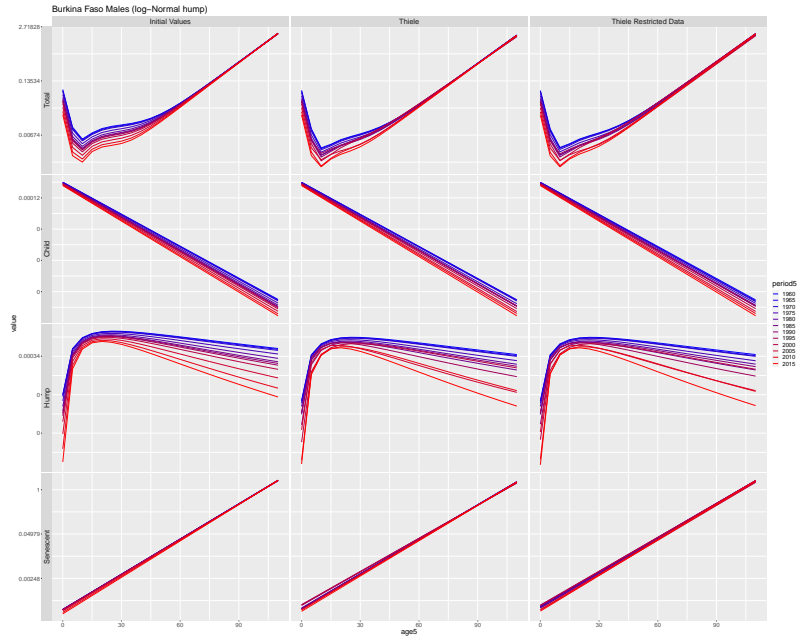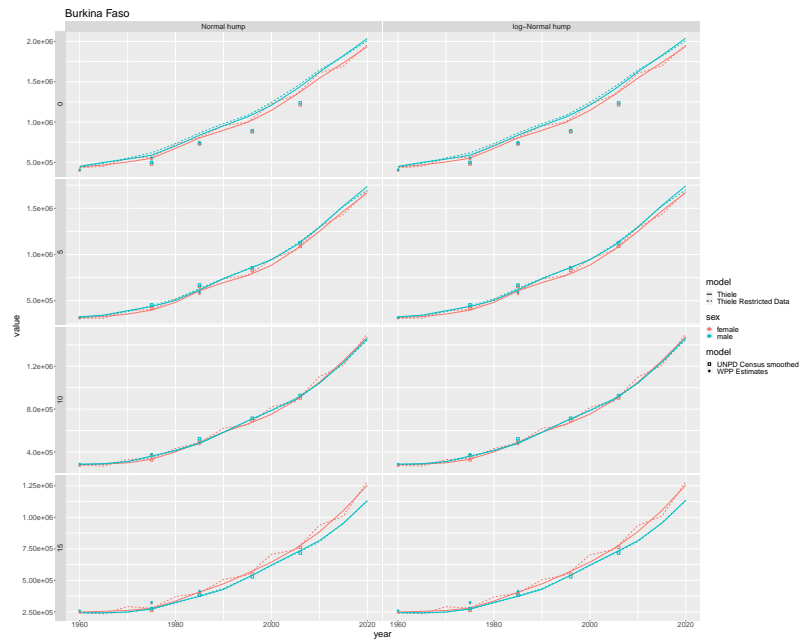

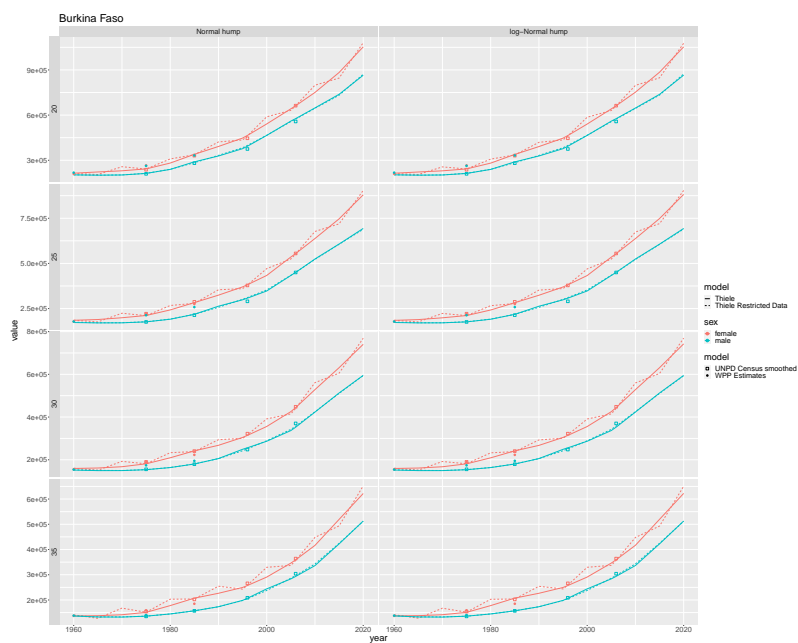Figure 14: Thiele Decomposed
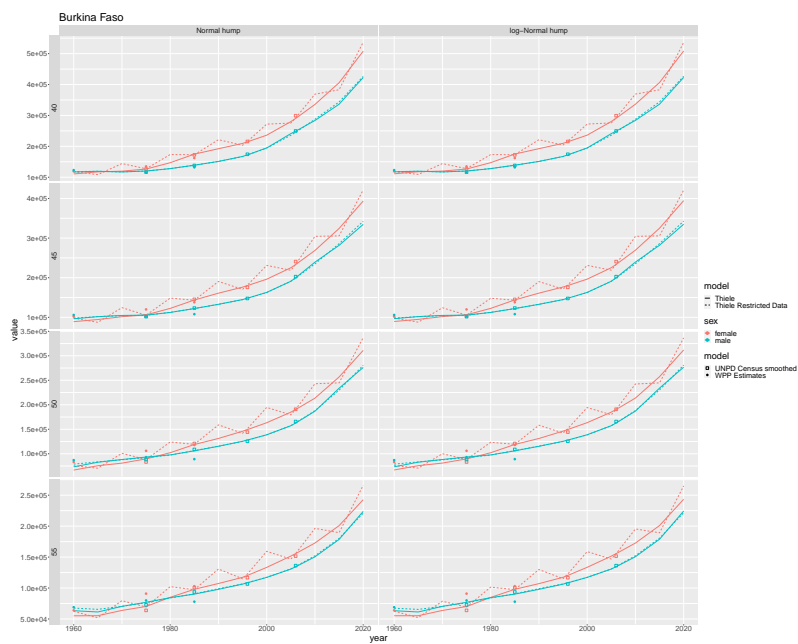
Figure 15: Population

Figure 16: Population
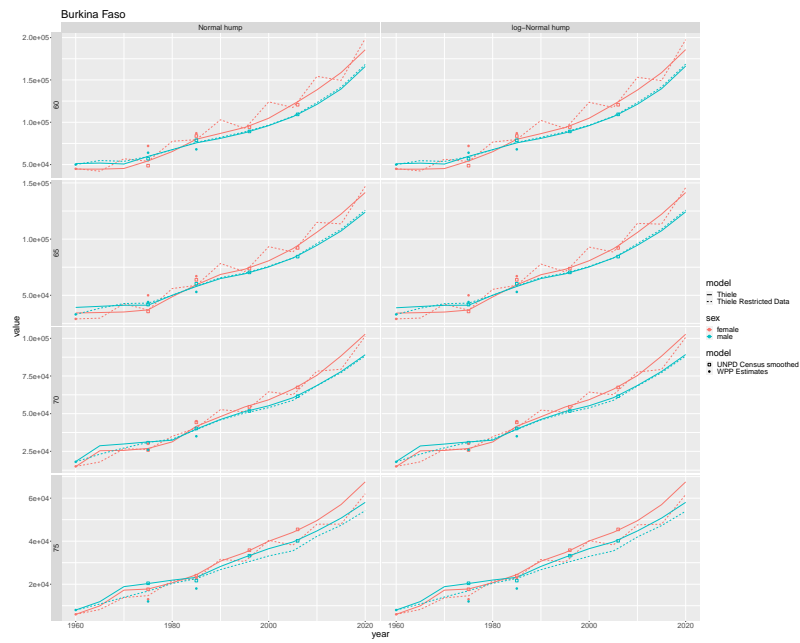
Figure 17: Population

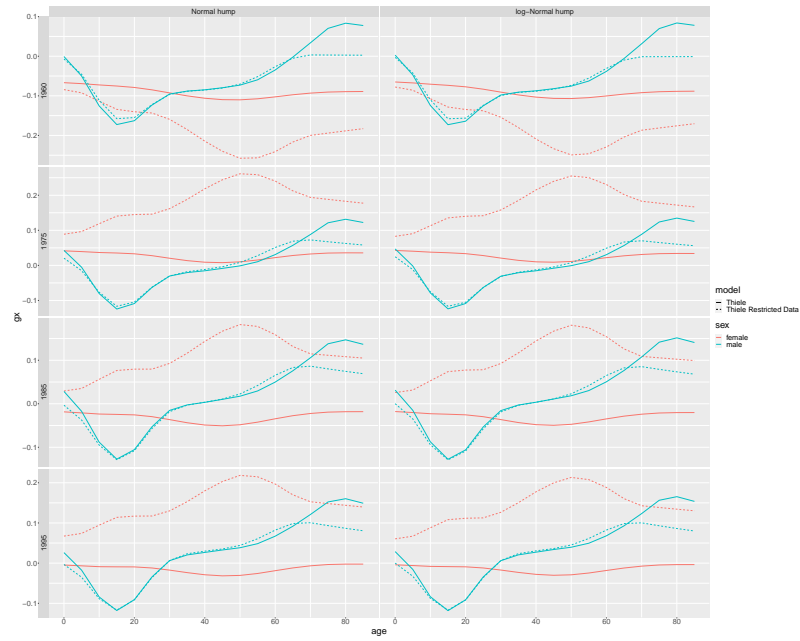Figure 18: Population
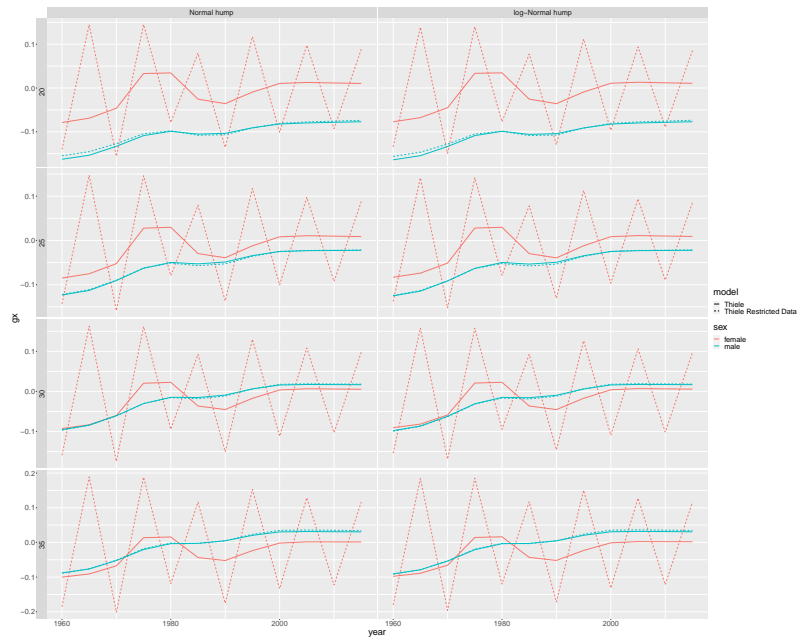
Figure 19: Population

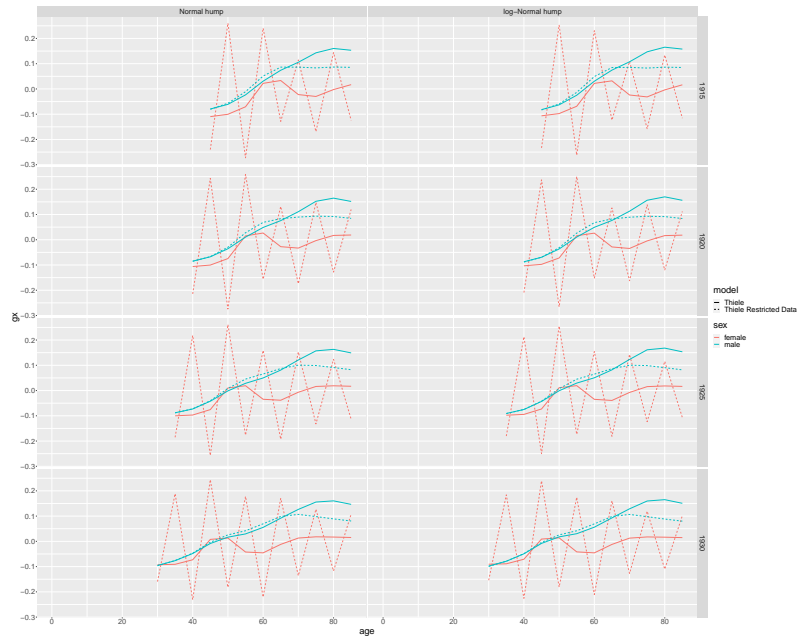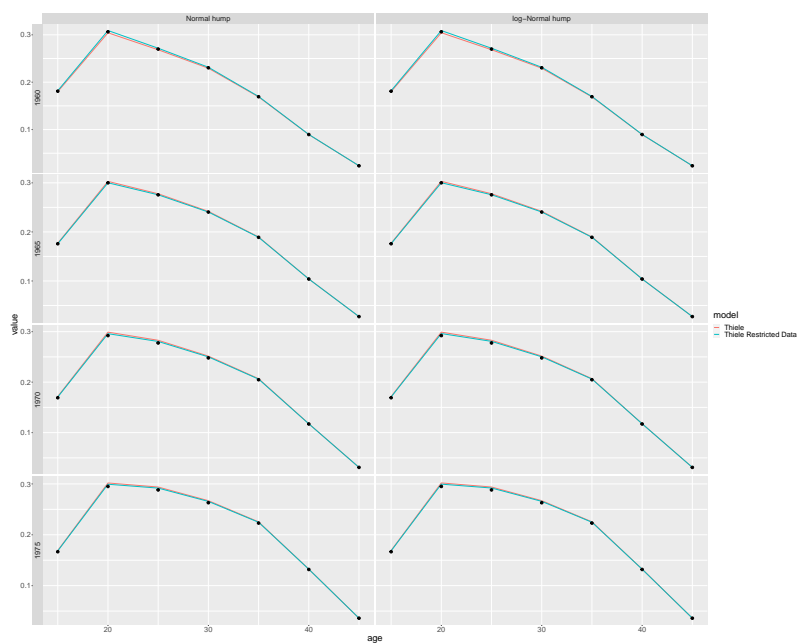Figure 20: Migration

Figure 21: Migration
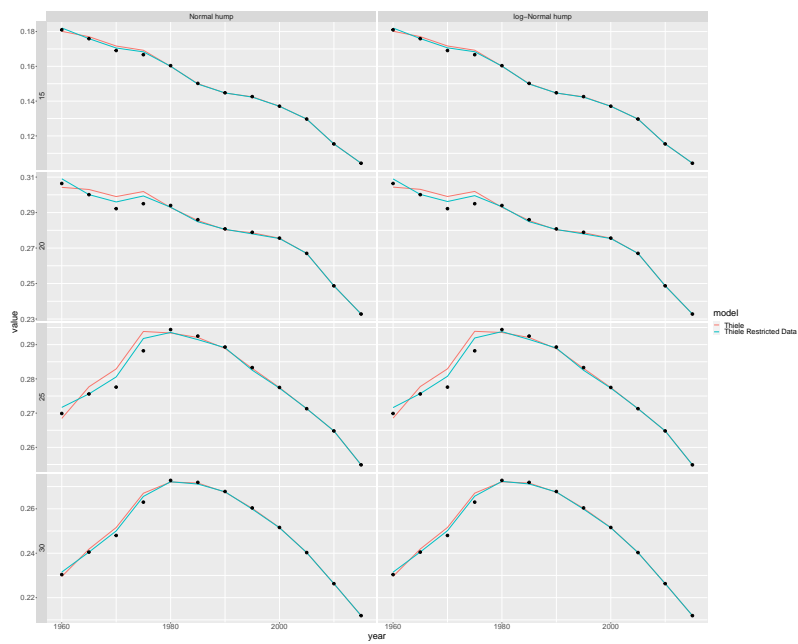

Figure 22: Migration

15

Figure 23: Fertility

Figure 24: Fertility