

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 log-Normal Hump RW

```
##   user system elapsed
## 21.60   0.50   22.29
```

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

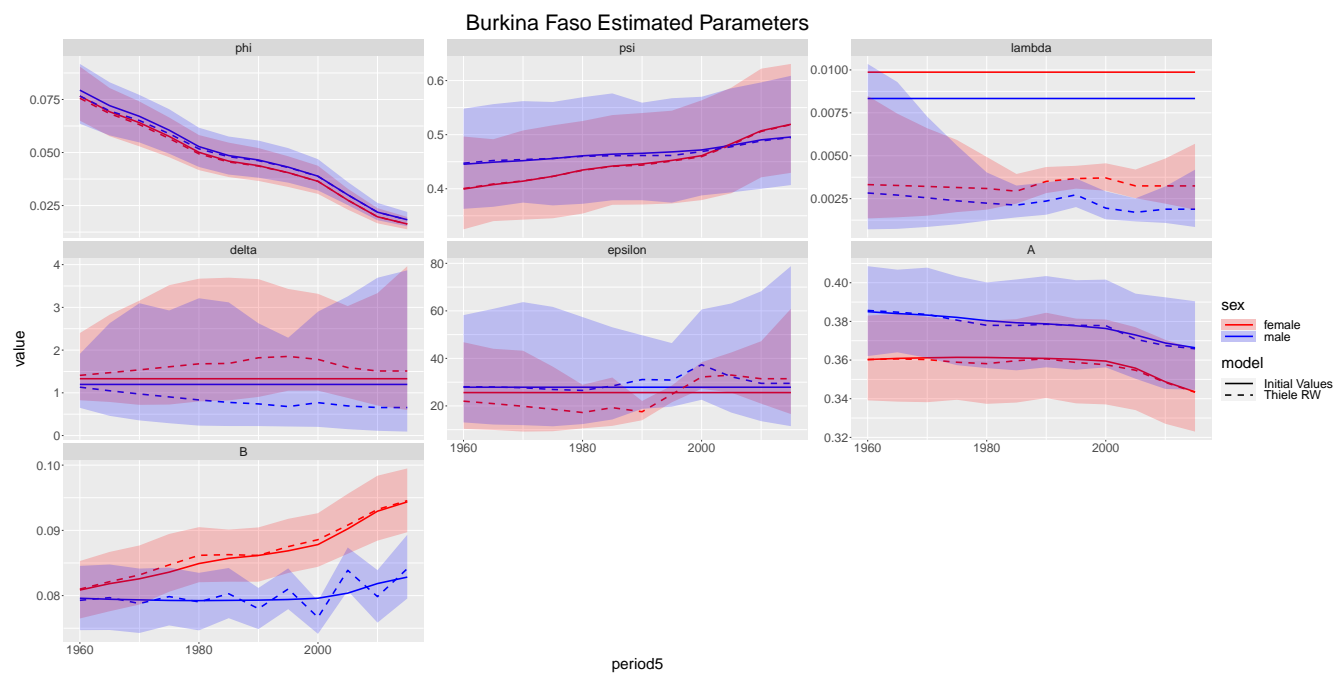


Figure 1: Estimated parameters

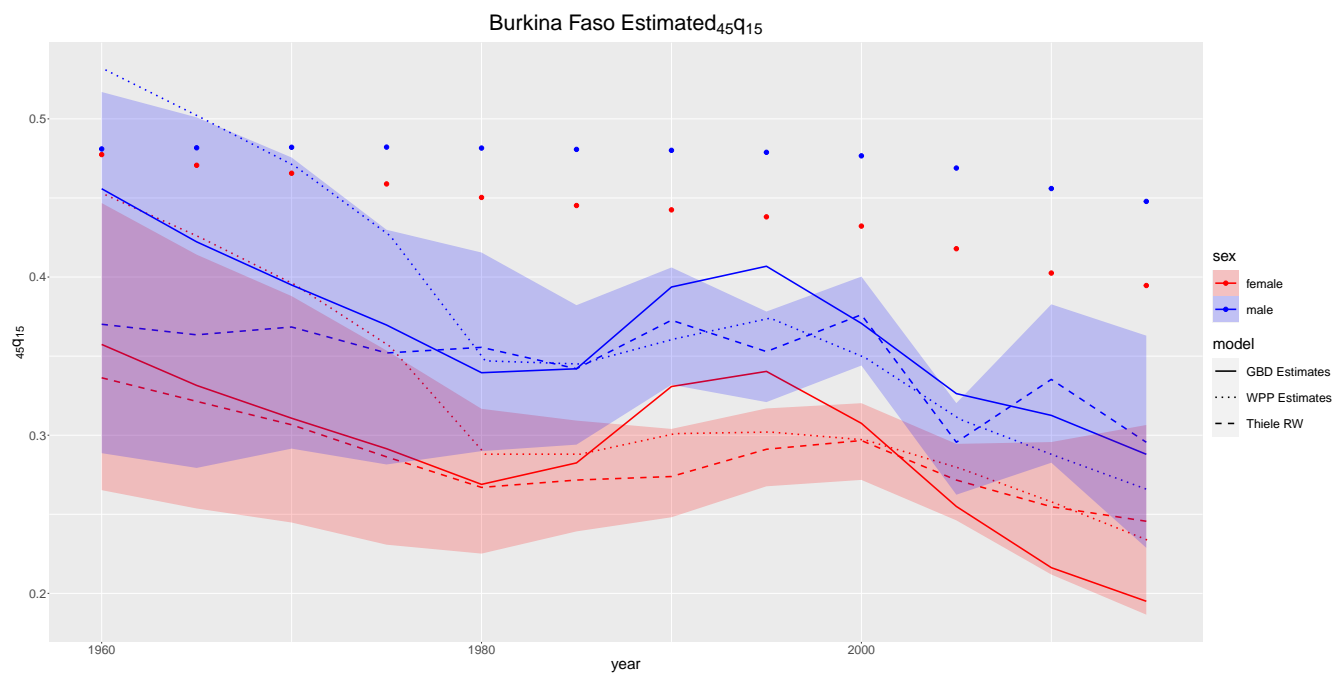


Figure 2: Estimated $_{45}q_{15}$

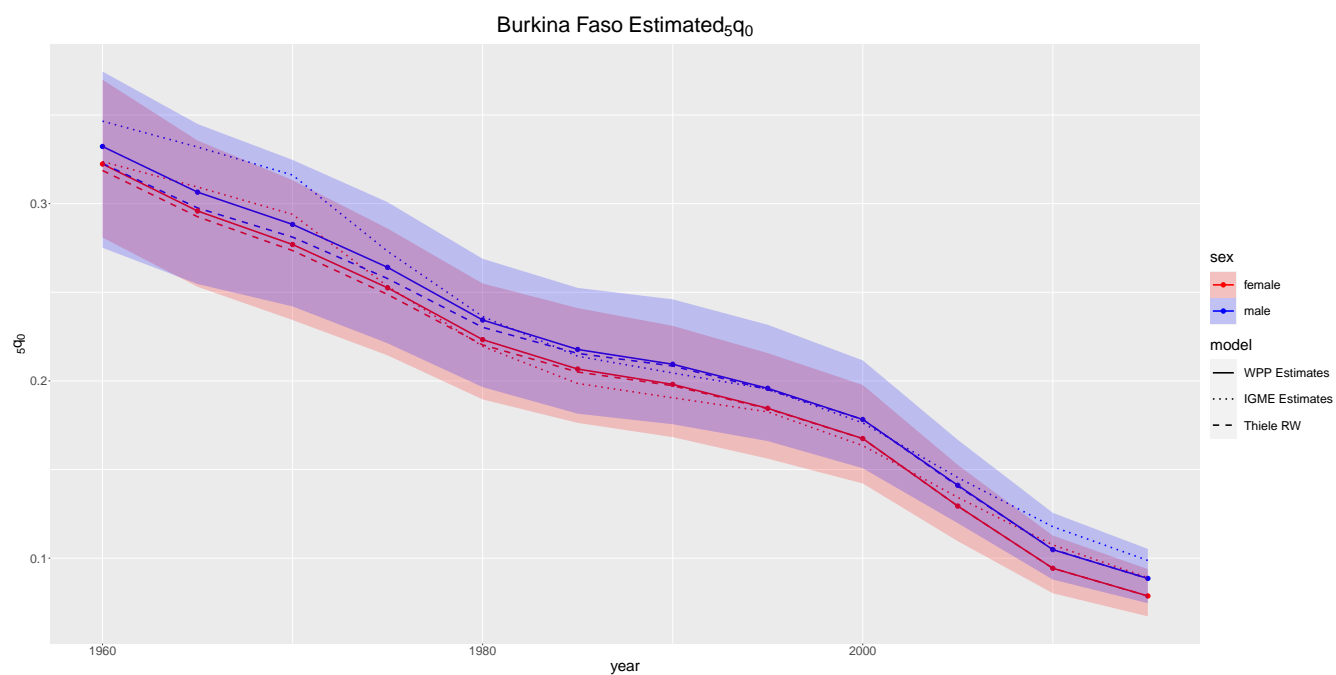


Figure 3: Estimated ${}_5q_0$

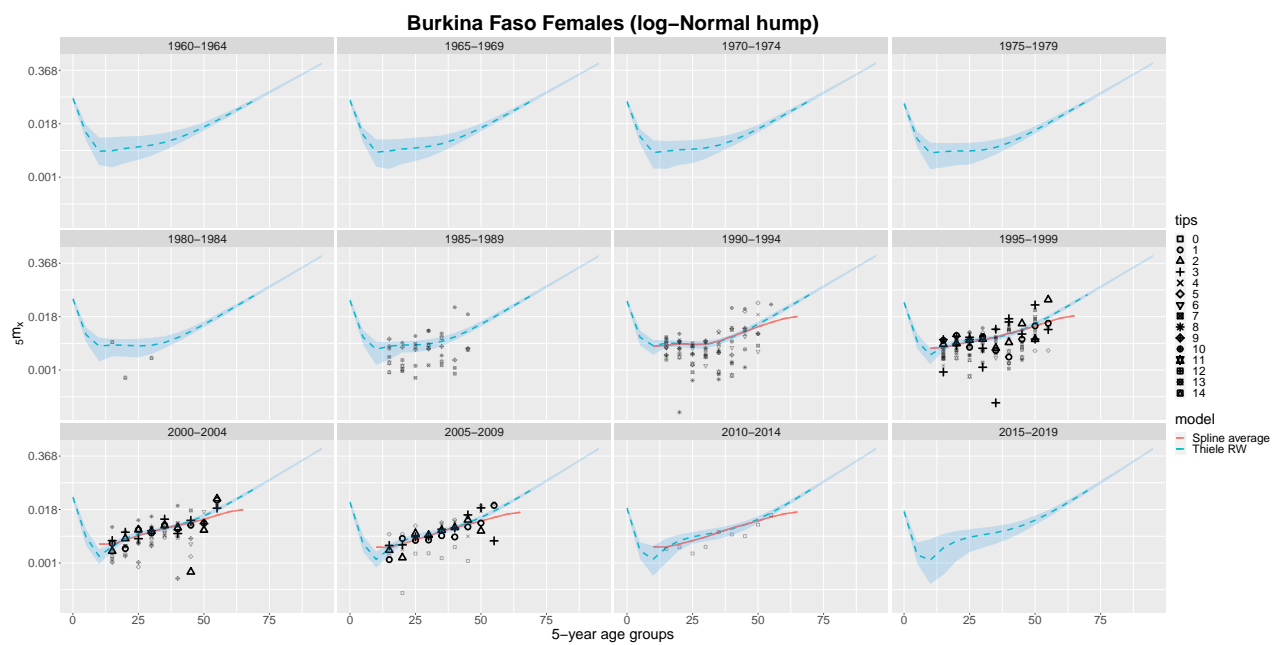


Figure 4: Mortality Schedules

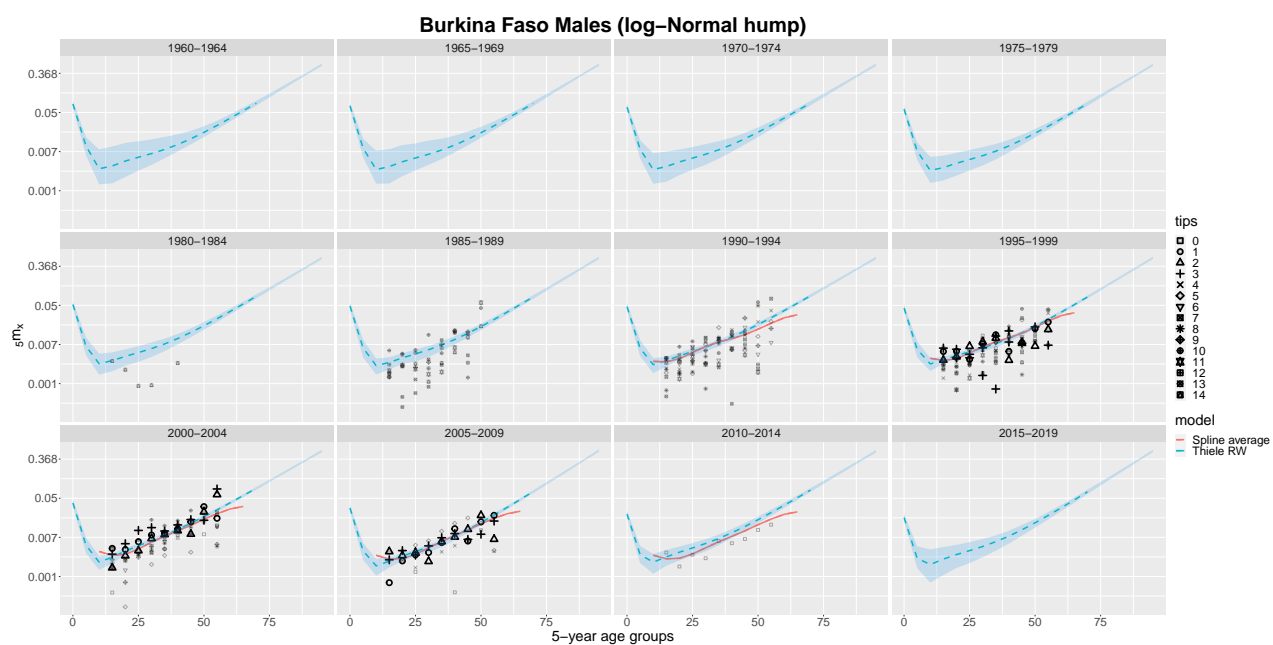


Figure 5: Mortality Schedules

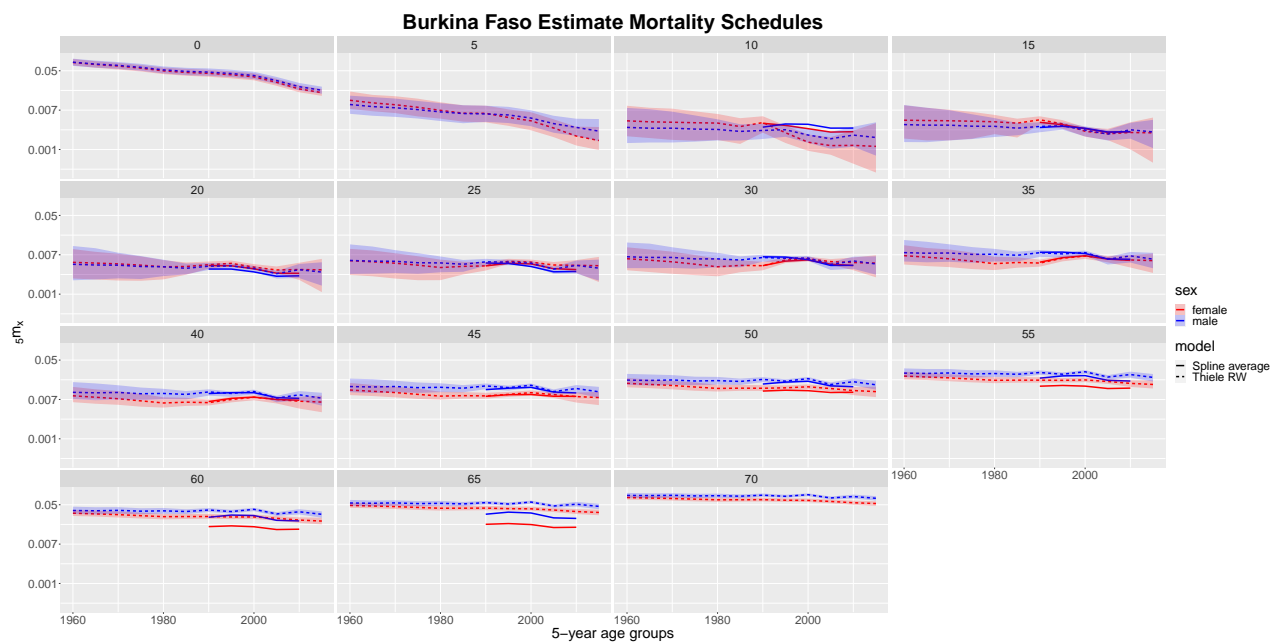


Figure 6: Mortality Schedules

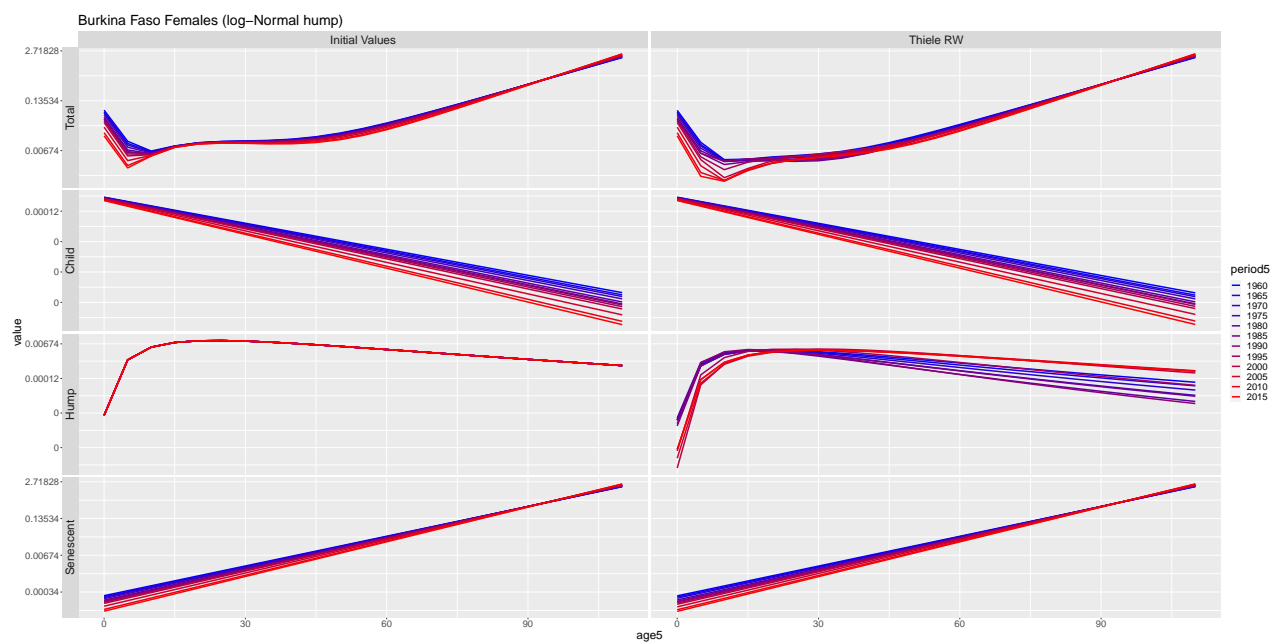


Figure 7: Thiele Decomposed

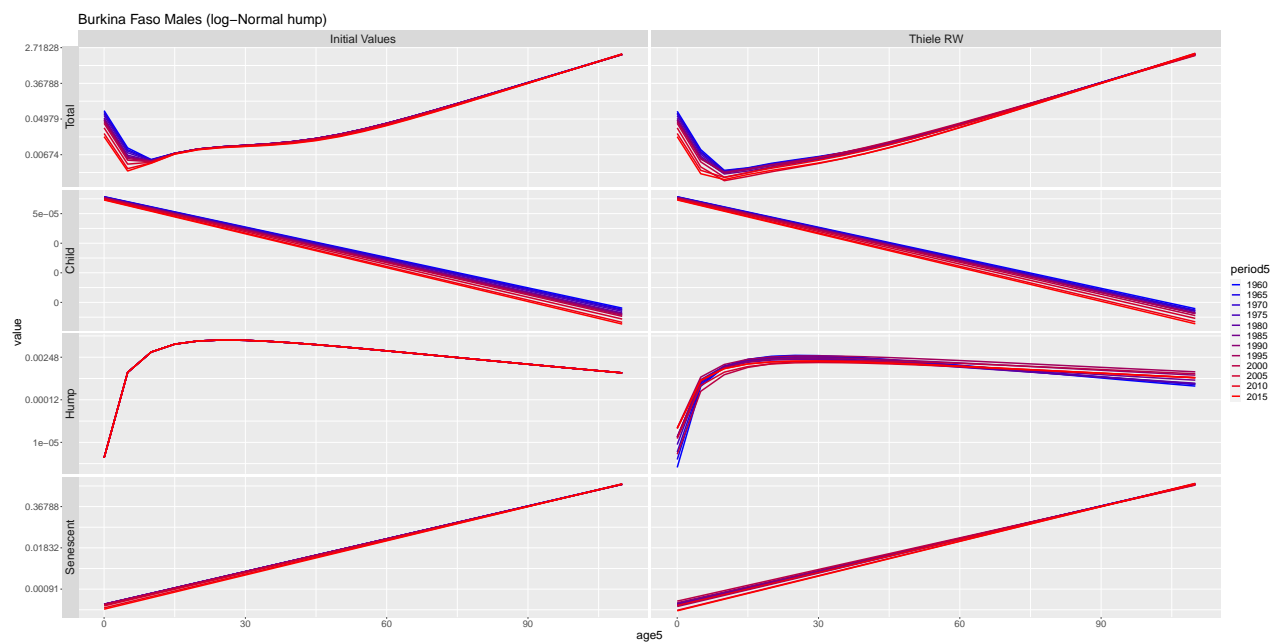


Figure 8: Thiele Decomposed

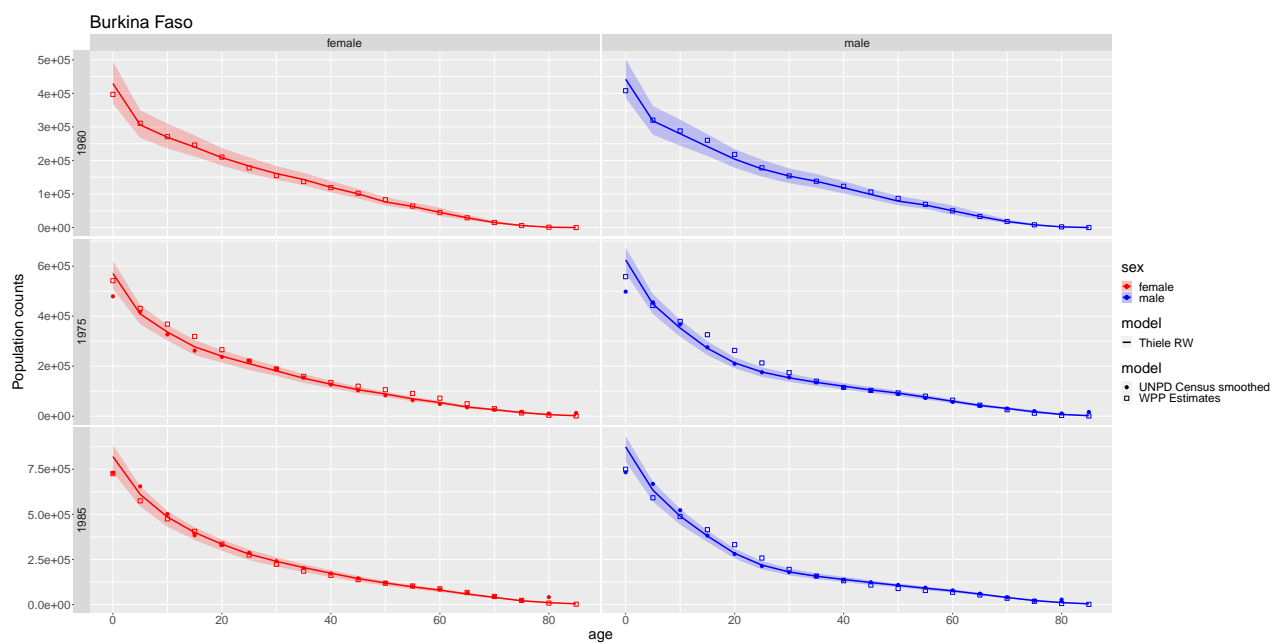


Figure 9: Population

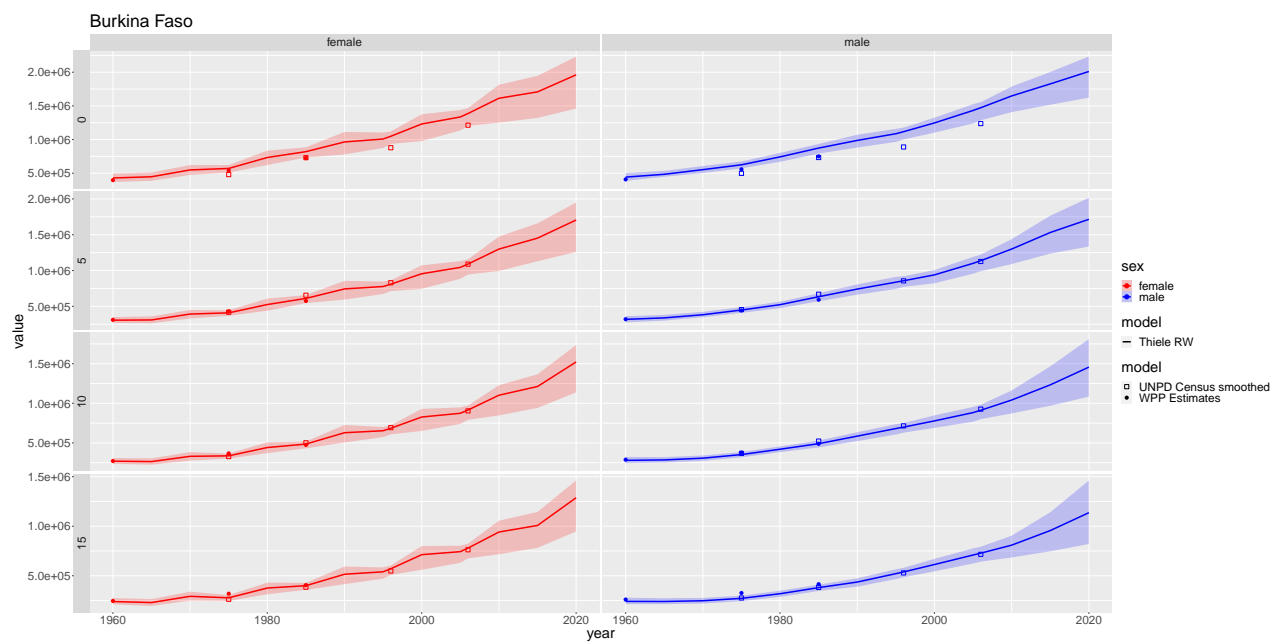


Figure 10: Population

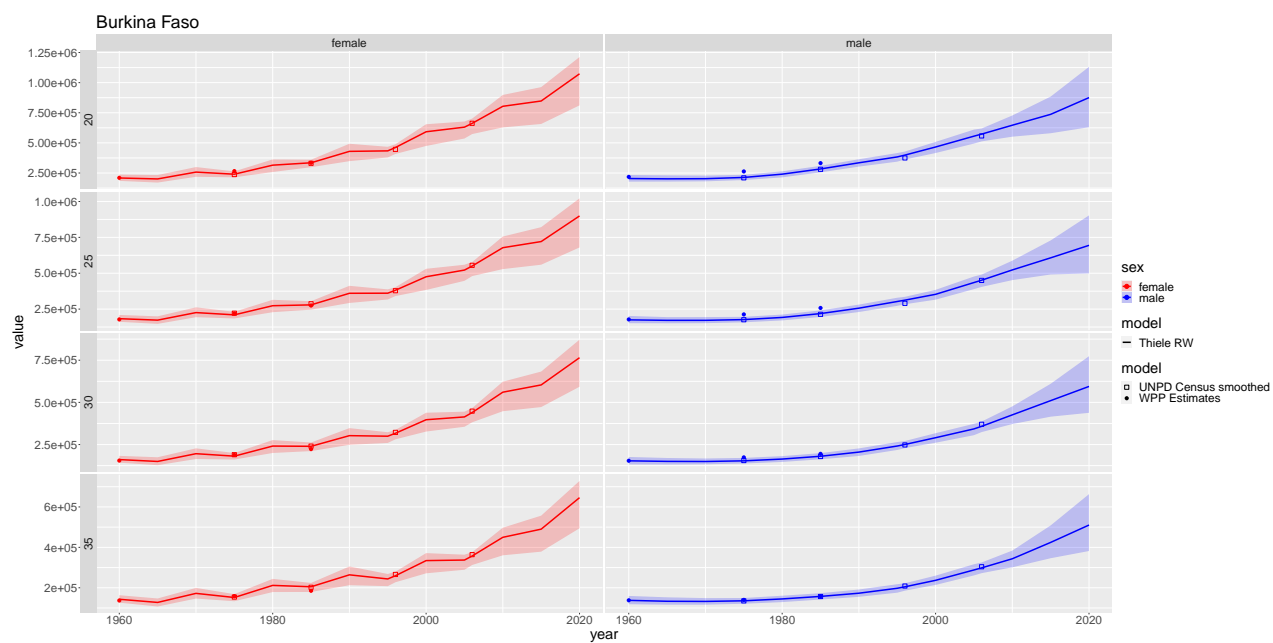


Figure 11: Population

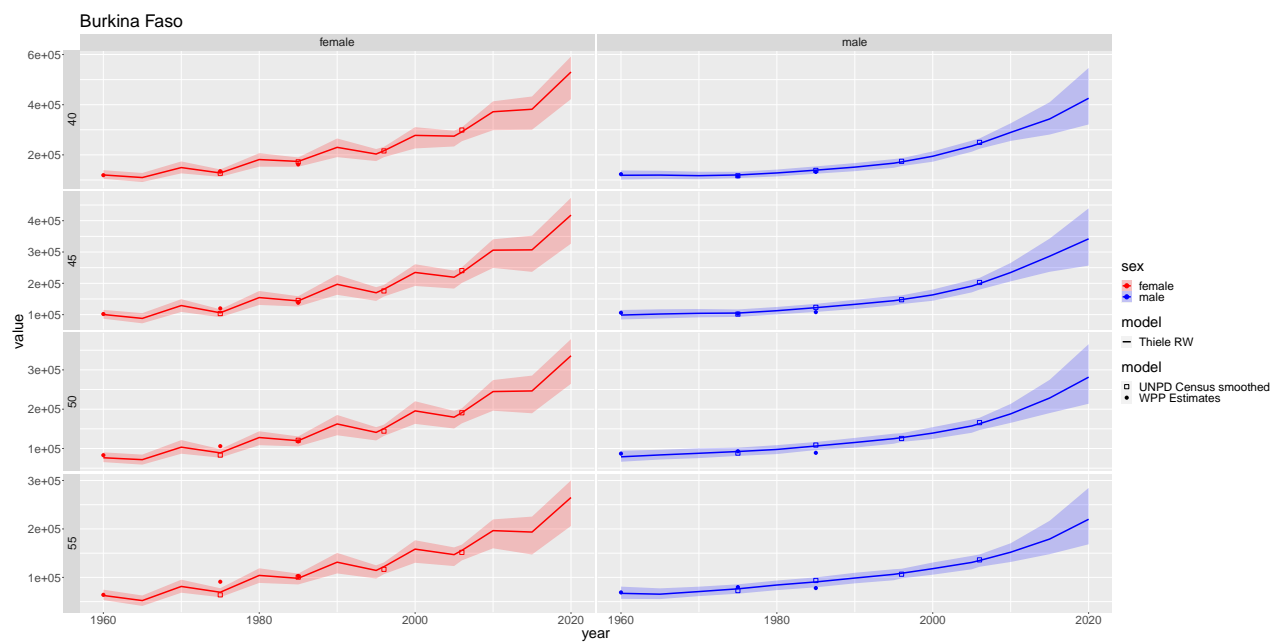


Figure 12: Population

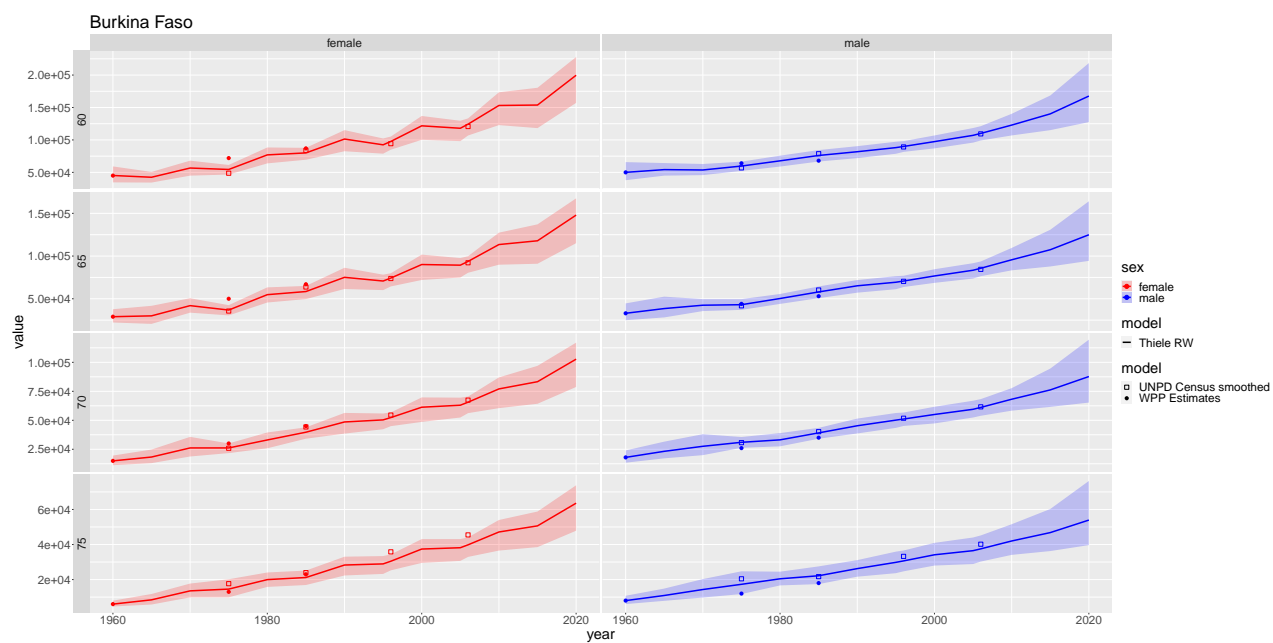


Figure 13: Population

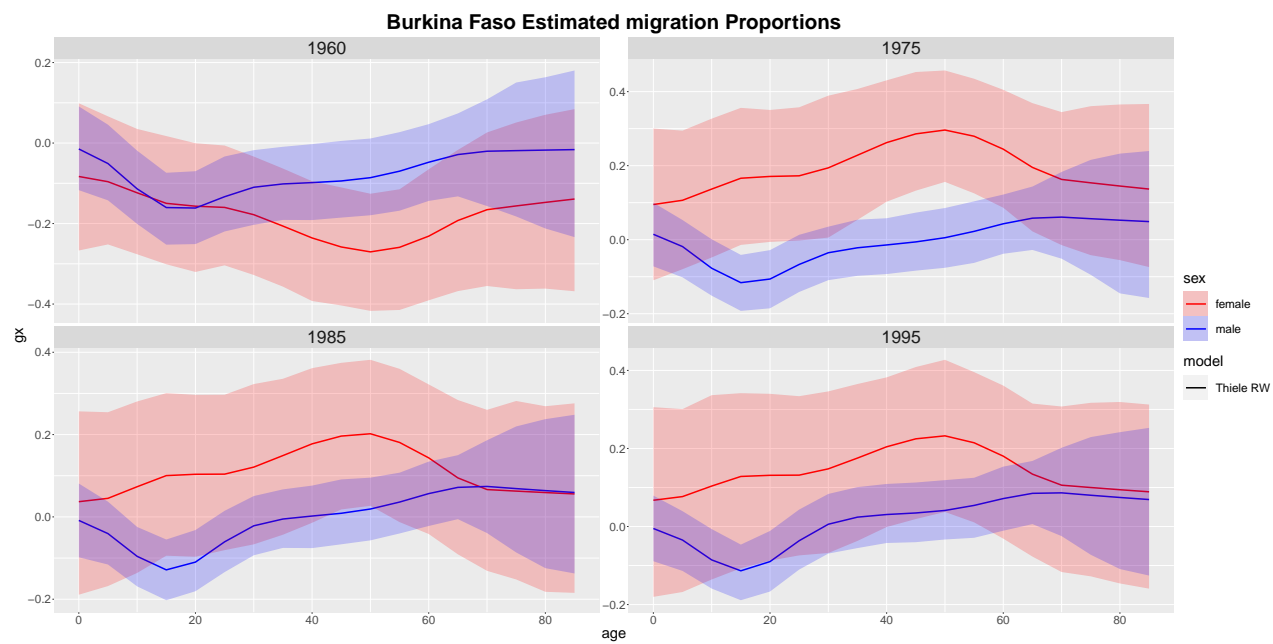


Figure 14: Migration

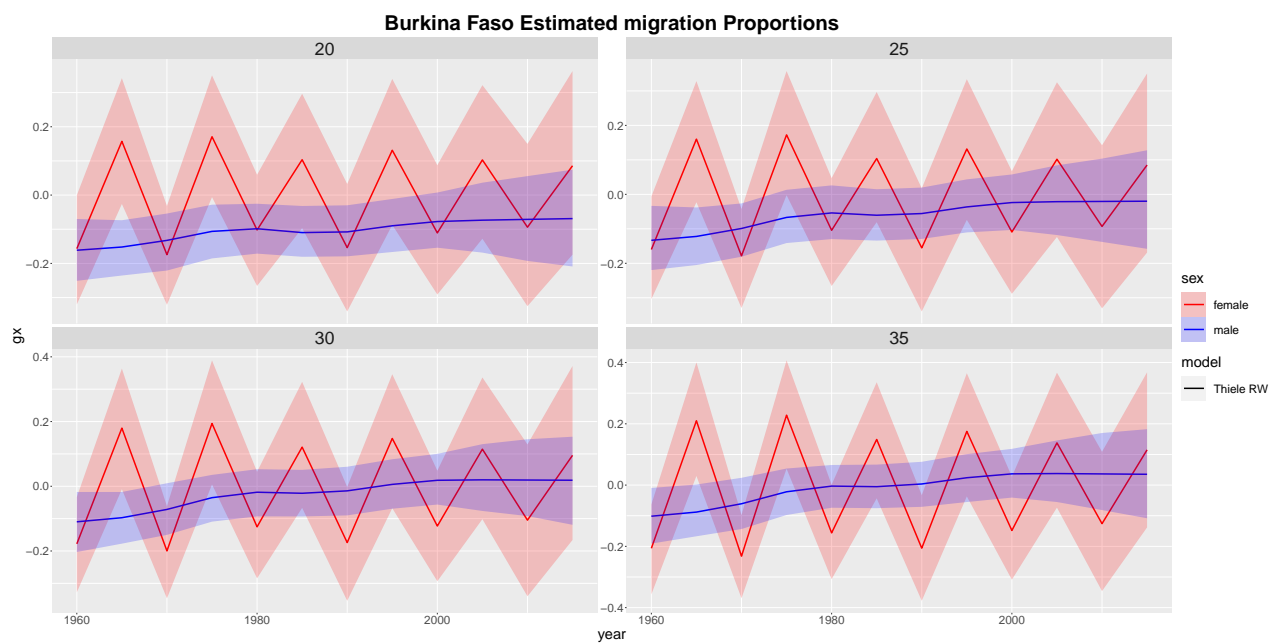


Figure 15: Migration

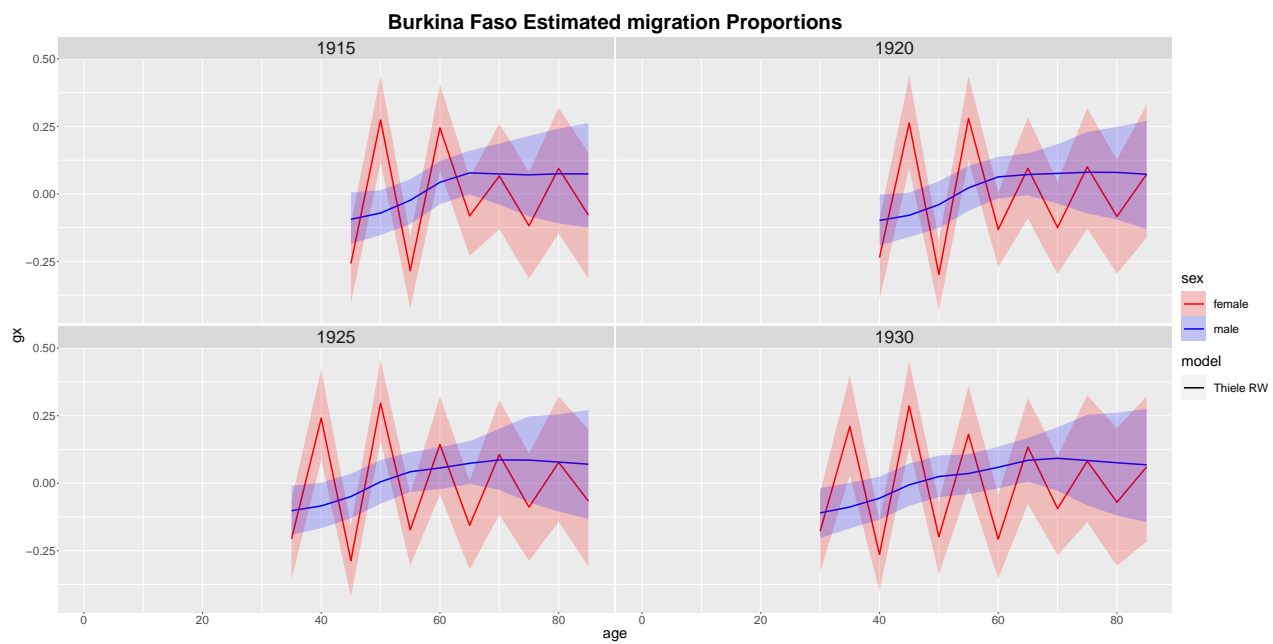


Figure 16: Migration

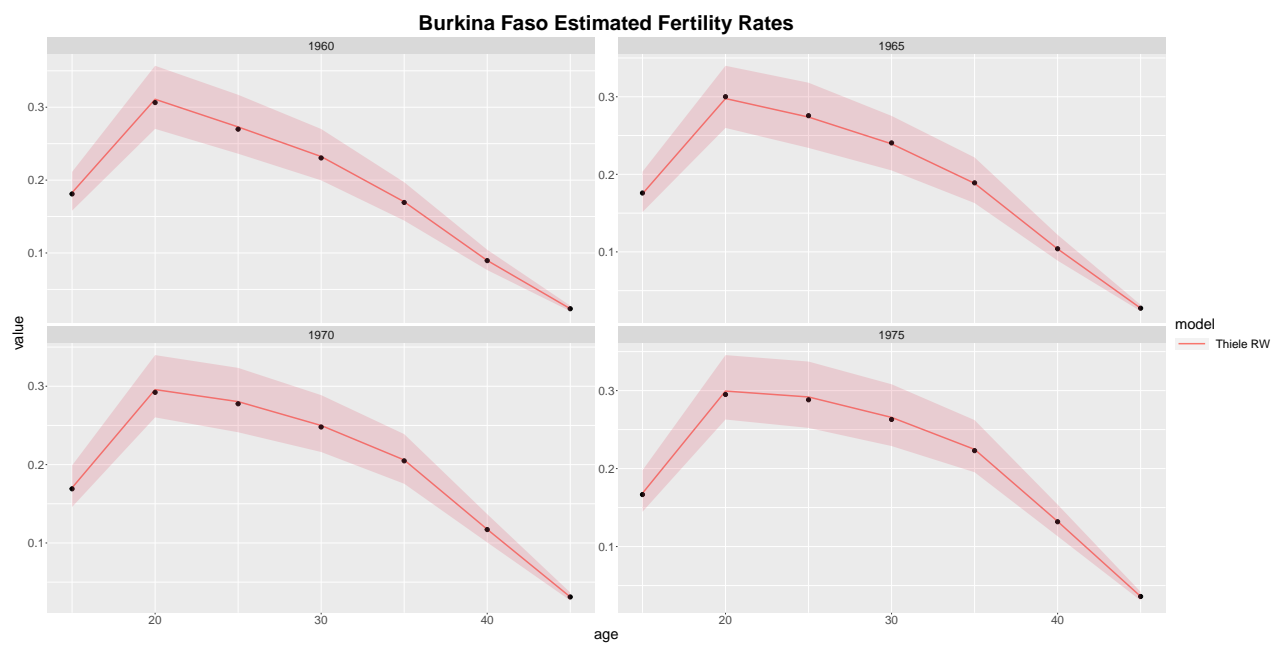


Figure 17: Fertility

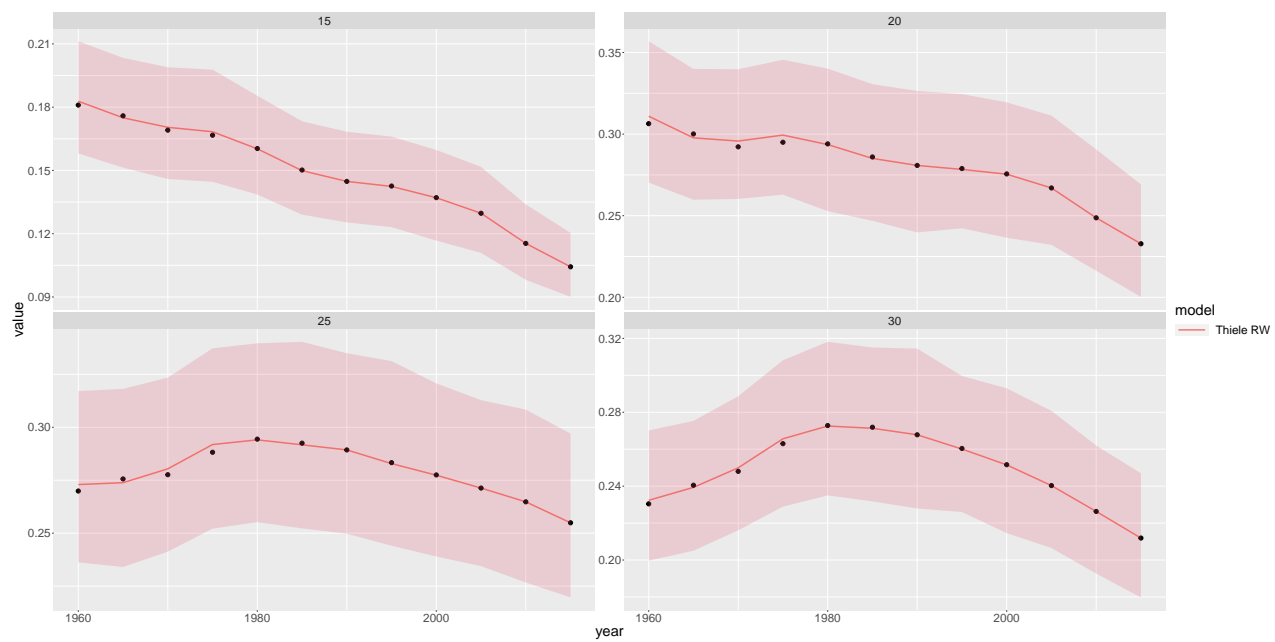


Figure 18: Fertility