Burkina Faso

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

```
## # A tibble: 87 x 4
##      age  `1985`  `1996`  `2006`
##    <dbl>   <dbl>   <dbl>   <dbl>
##  1     0 168022. 172870  232734.
##  2     1 123865. 158974. 223944.
##  3     2 142053. 174410. 242692.
##  4     3 146137. 179321. 242280.
##  5     4 146472. 179999. 241620.
##  6     5 142058. 176036. 234739.
##  7     6 138903. 174501. 231391.
##  8     7 135512. 170871. 224614.
##  9     8 128769. 165383. 214903.
## 10     9 121117. 158882. 204727.
## # ... with 77 more rows
```

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

```
## # A tibble: 87 x 4
##      age  `1985`  `1996`  `2006`
##    <dbl>   <dbl>   <dbl>   <dbl>
##  1     0 167871. 173583  236268.
##  2     1 125161. 161235  229350.
##  3     2 143298. 177204. 248241.
##  4     3 146815. 181996. 247670.
##  5     4 147623. 183609. 247476.
##  6     5 143846. 180348. 241283.
##  7     6 141411. 179723. 238862.
##  8     7 138594. 176772. 232746.
##  9     8 132278. 171637. 223407.
## 10     9 125060. 165350. 213548.
## # ... with 77 more rows
```

Thiele log-Normal Hump Spline

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

```
##           log_tau2_logpop_f          log_tau2_logpop_f          log_tau2_logpop_m          log_tau2_
##                   6.4569927                  5.0459838                  6.5037274                  5
##               log_tau2_gx_m        log_lambda_gx_age_f        log_lambda_gx_age_m       log_lambda_g
##                   3.1162783                  7.6169417                  6.3153462                  8
##     log_lambda_gx_agetime_m             log_lambda_tp log_lambda_tp_0_inflated_sd          log_dispe
##                   6.9077536                  1.7253467                 -0.6244466                  0
##     log_marginal_prec_psi_f      log_marginal_prec_A_f      log_marginal_prec_B_f     log_marginal_pre
##                   4.3397035                  6.8078015                  7.0611257                  4
##       log_marginal_prec_B_m          log_lambda_phi_f           log_lambda_psi_f        log_lambda_
##                   6.3289090                  4.4449752                  4.3699887                  4
##              log_lambda_A_f             log_lambda_B_f           log_lambda_phi_m          log_lambd
##                   4.3067494                  4.3220245                  4.4885299                  4
##        log_lambda_epsilon_m             log_lambda_A_m             log_lambda_B_m
##                   4.3467565                  4.3049180                  4.2751712
```

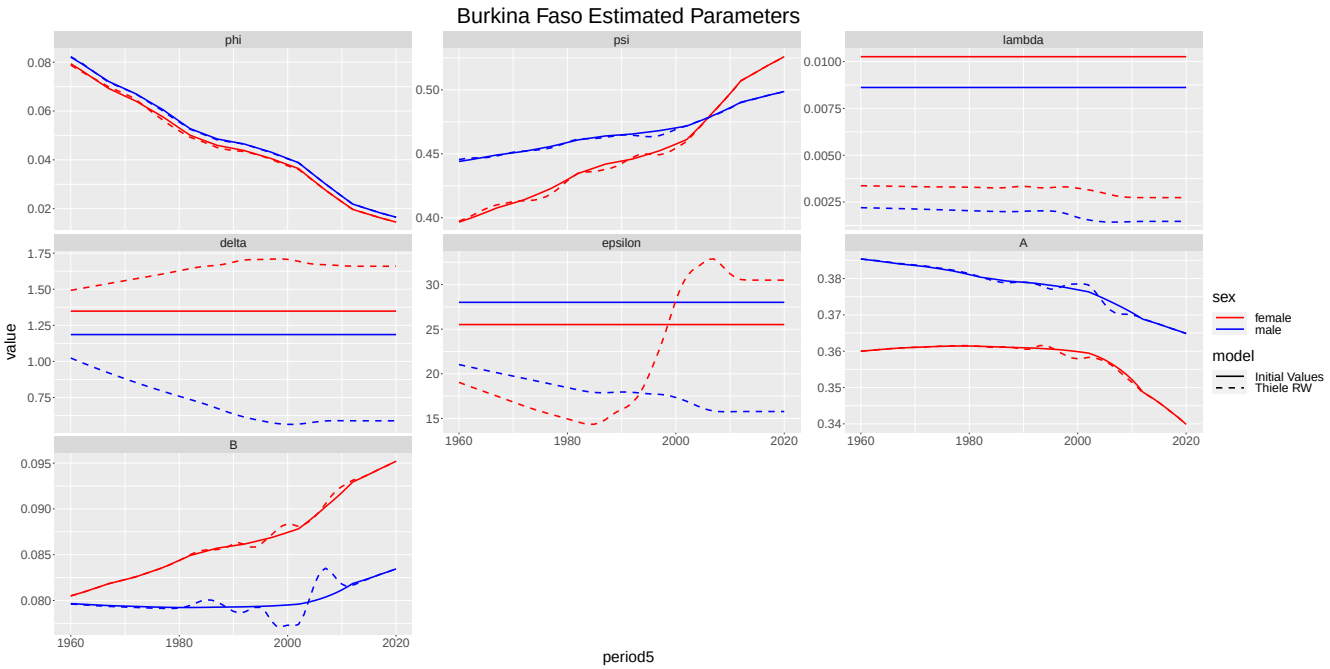

Figure 1: Estimated parameters

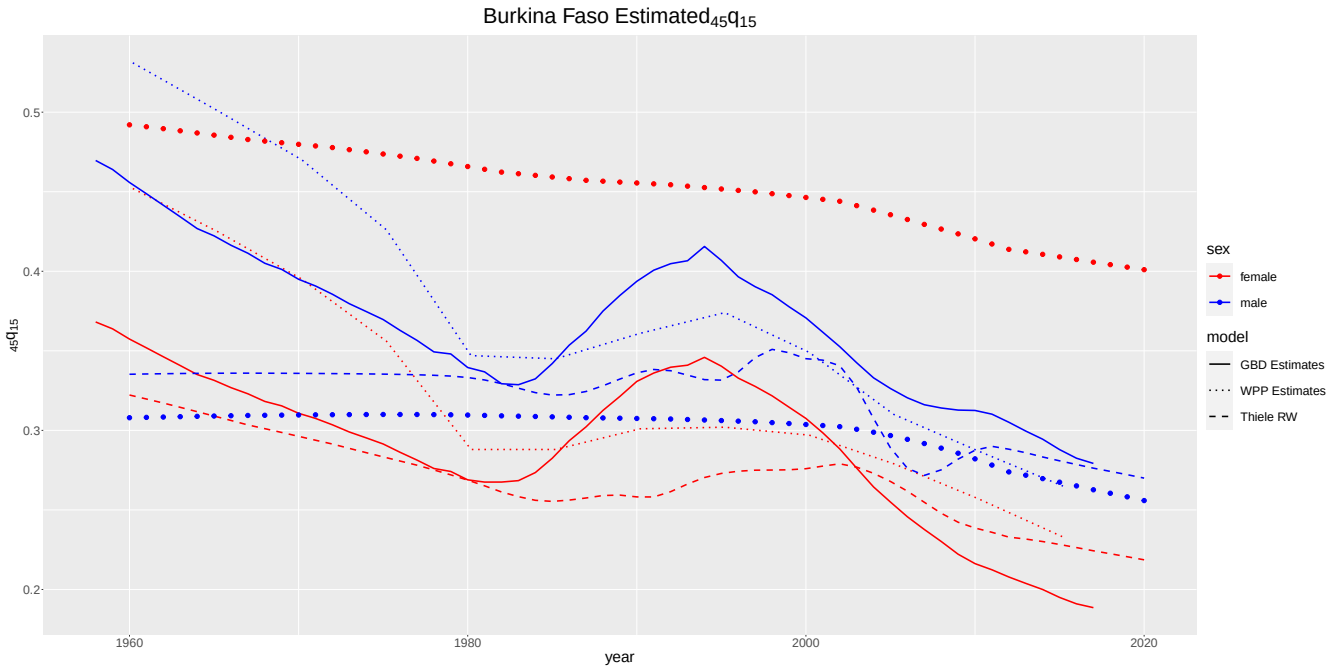

Figure 2: Estimated $_{45}q_{15}$

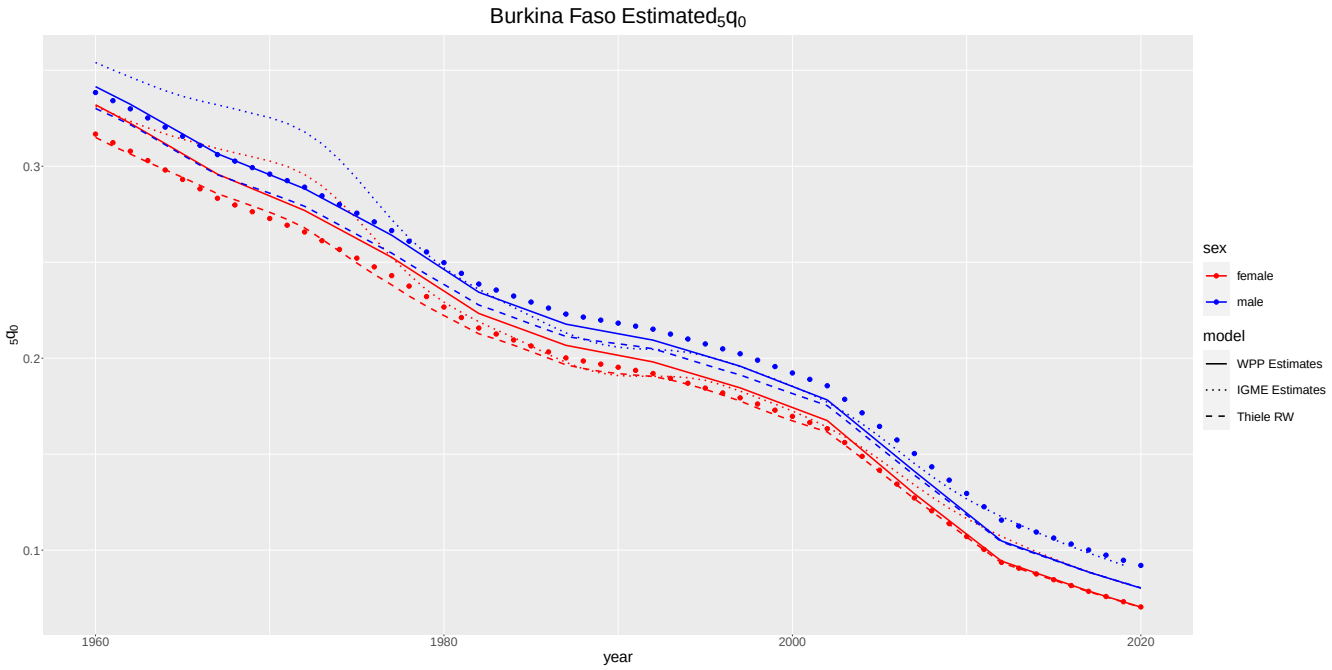

Figure 3: Estimated $_5q_0$

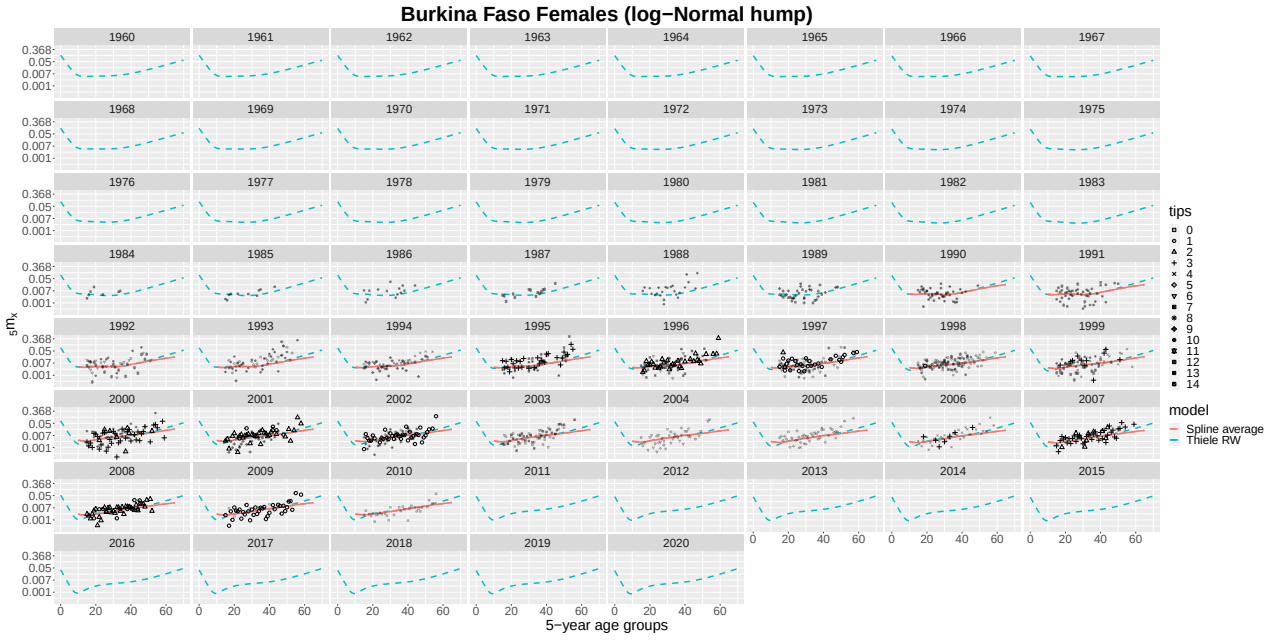

Figure 4: Mortality Schedules

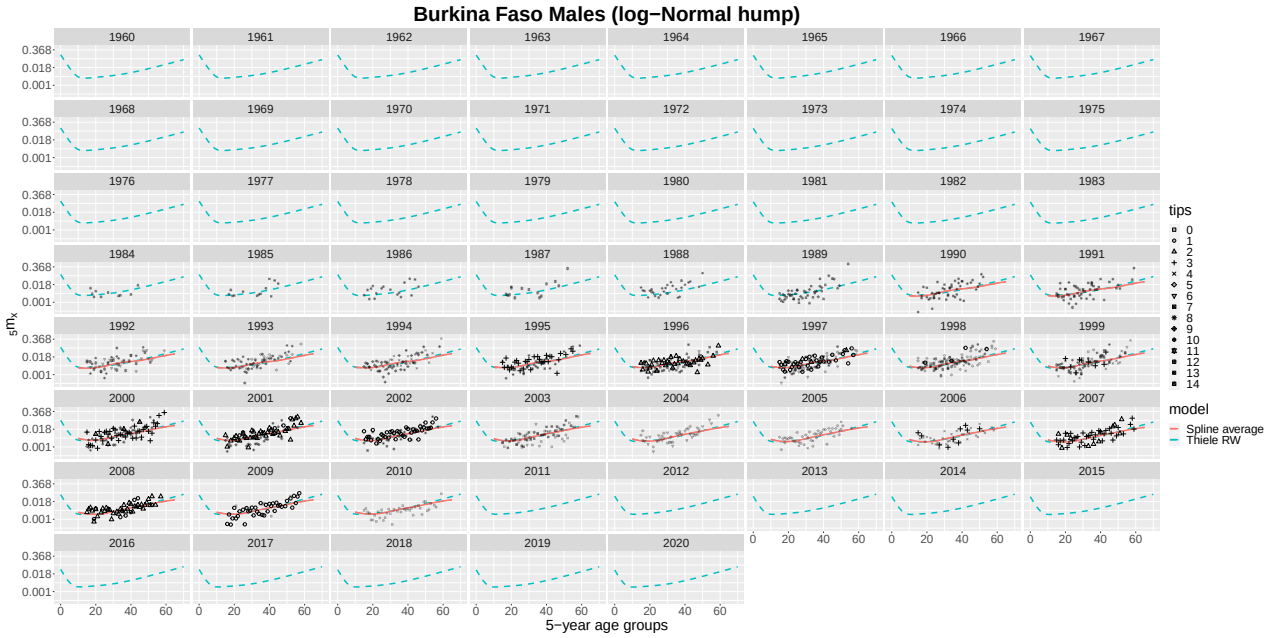

Figure 5: Mortality Schedules

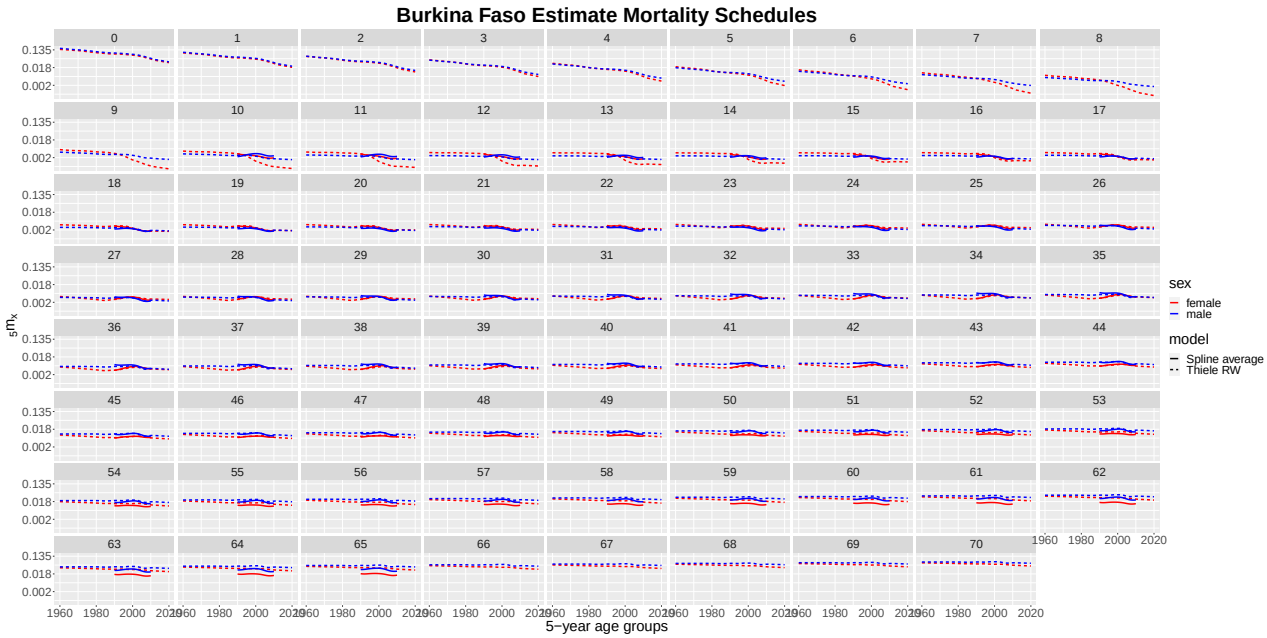

Figure 6: Mortality Schedules

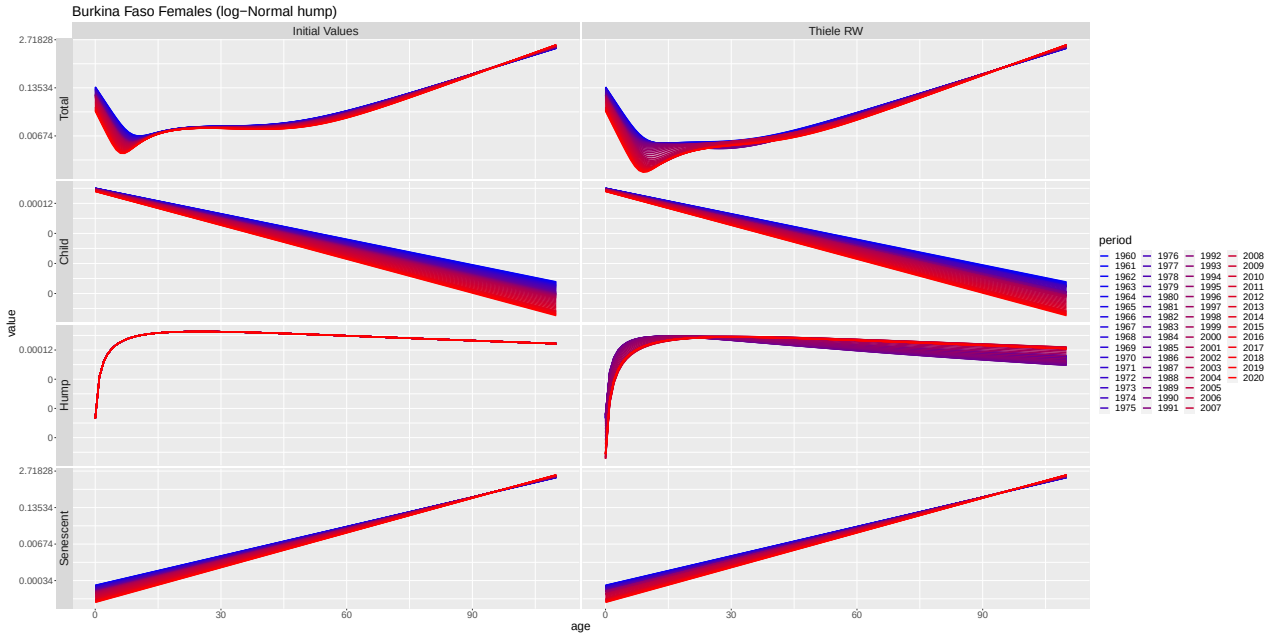

Figure 7: Thiele Decomposed

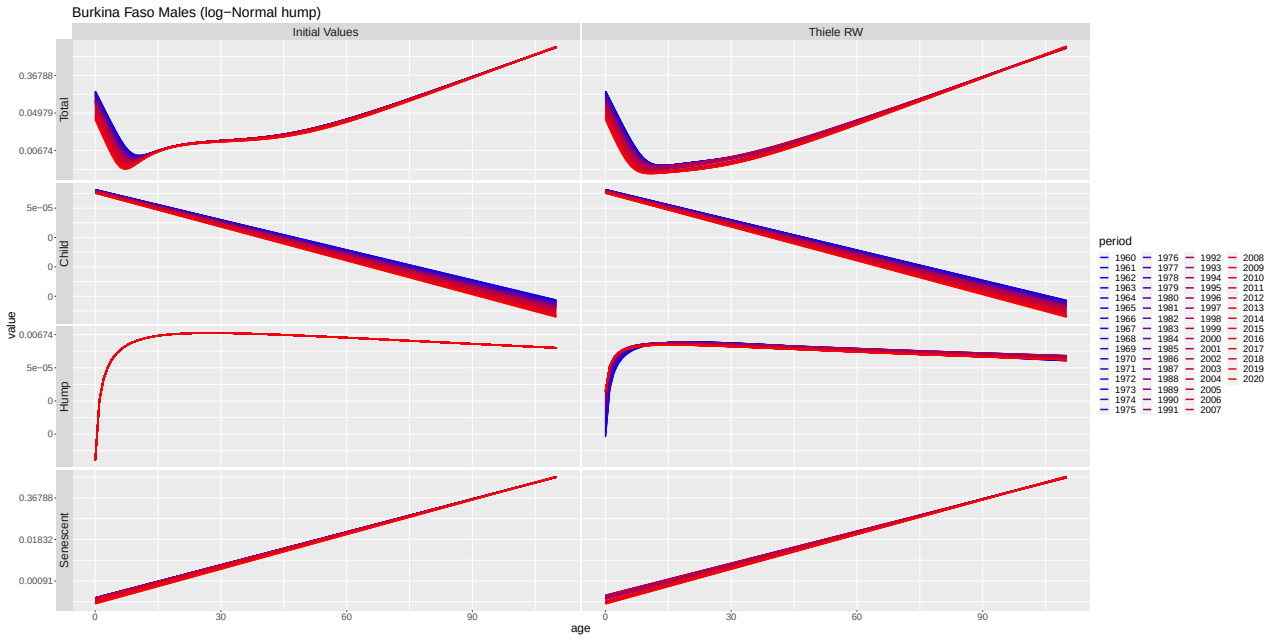

Figure 8: Thiele Decomposed

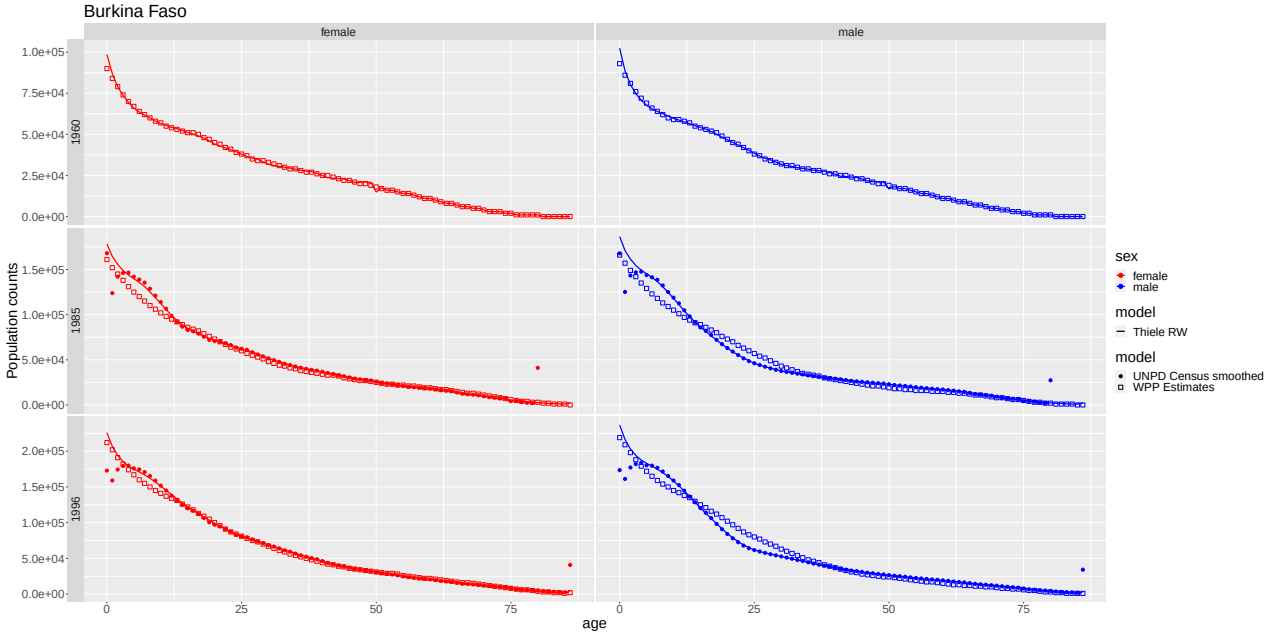

Figure 9: Population

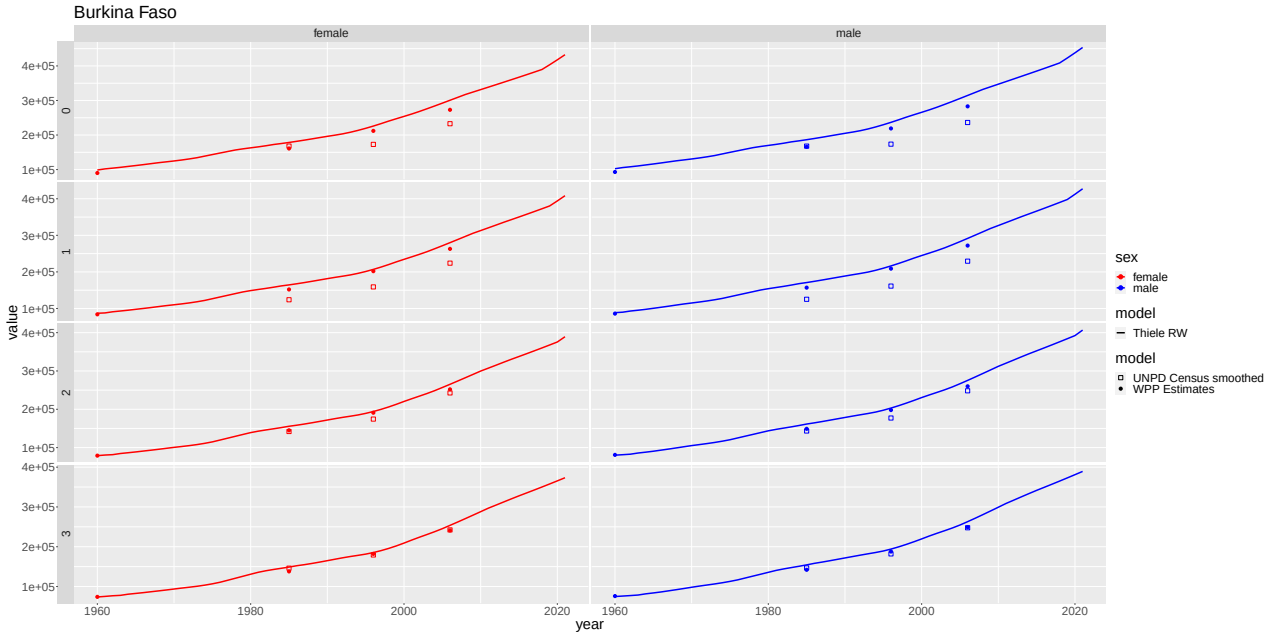

Figure 10: Population

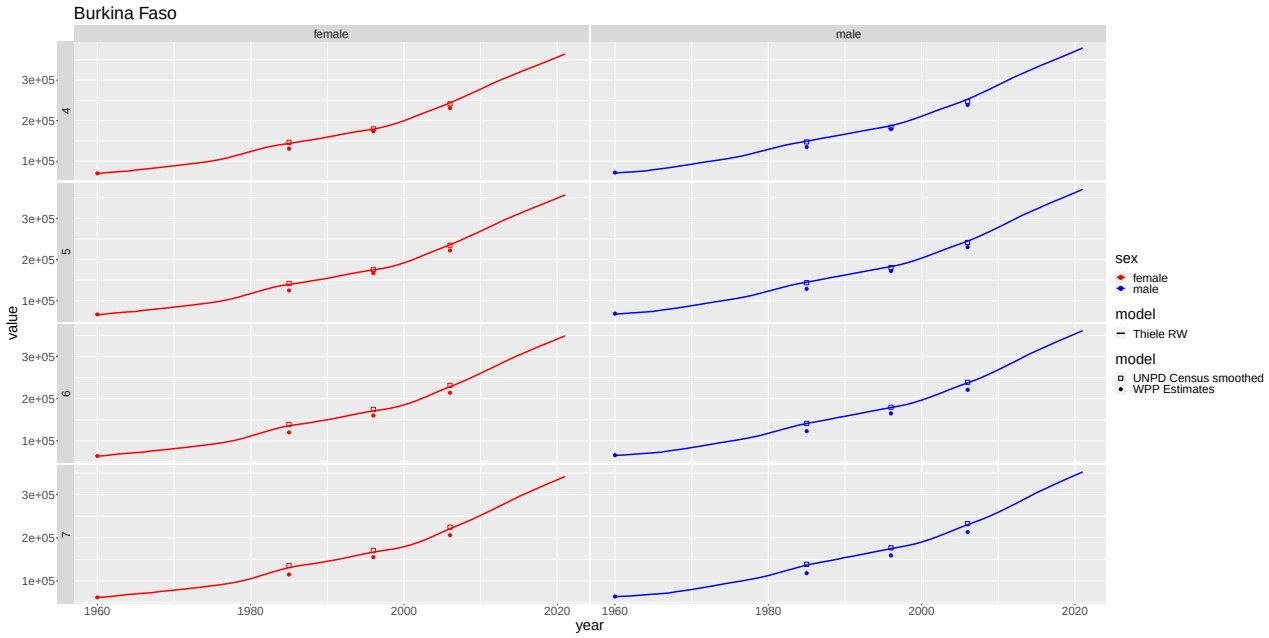

Figure 11: Population

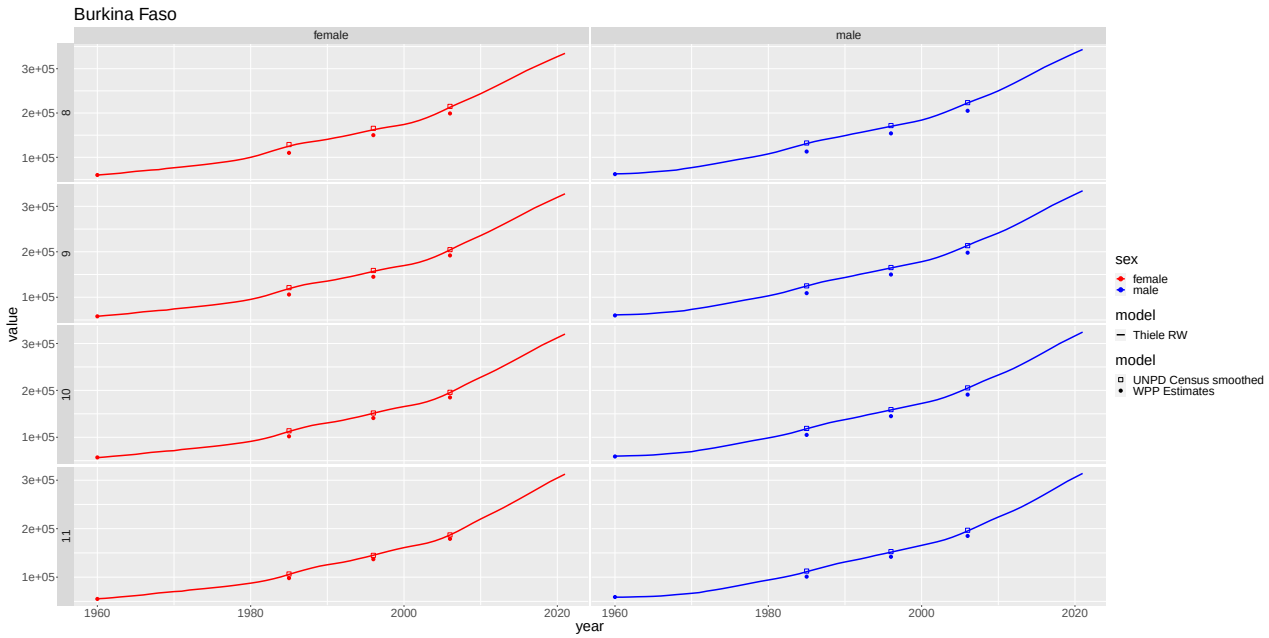

Figure 12: Population

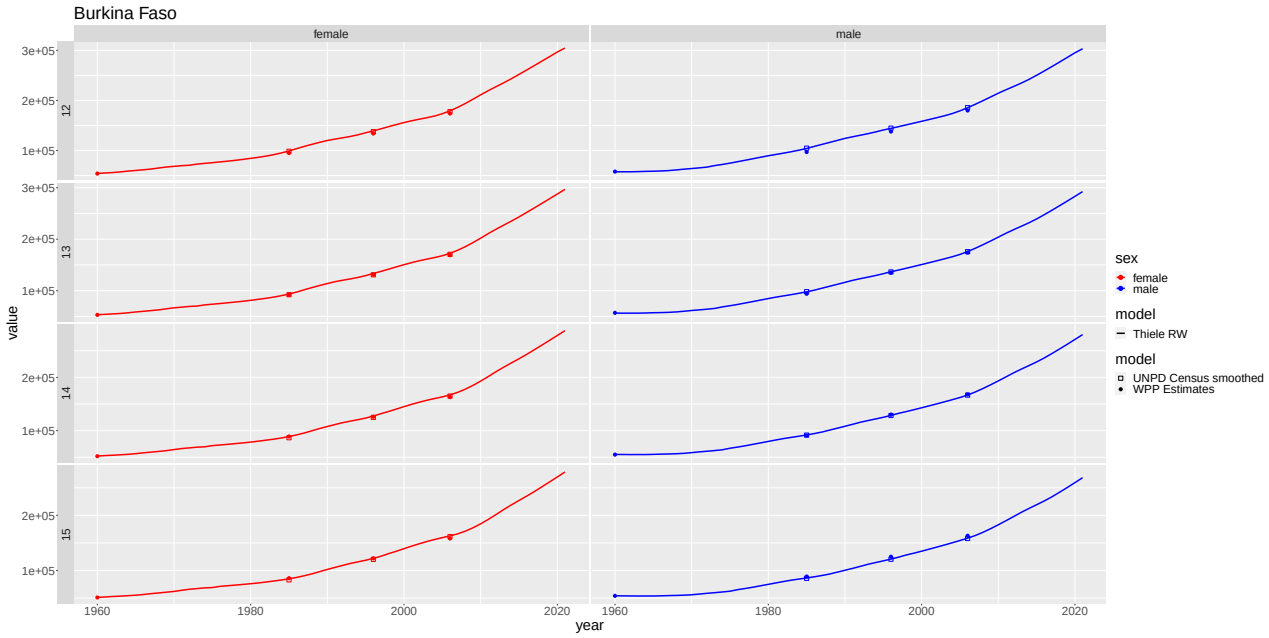

Figure 13: Population

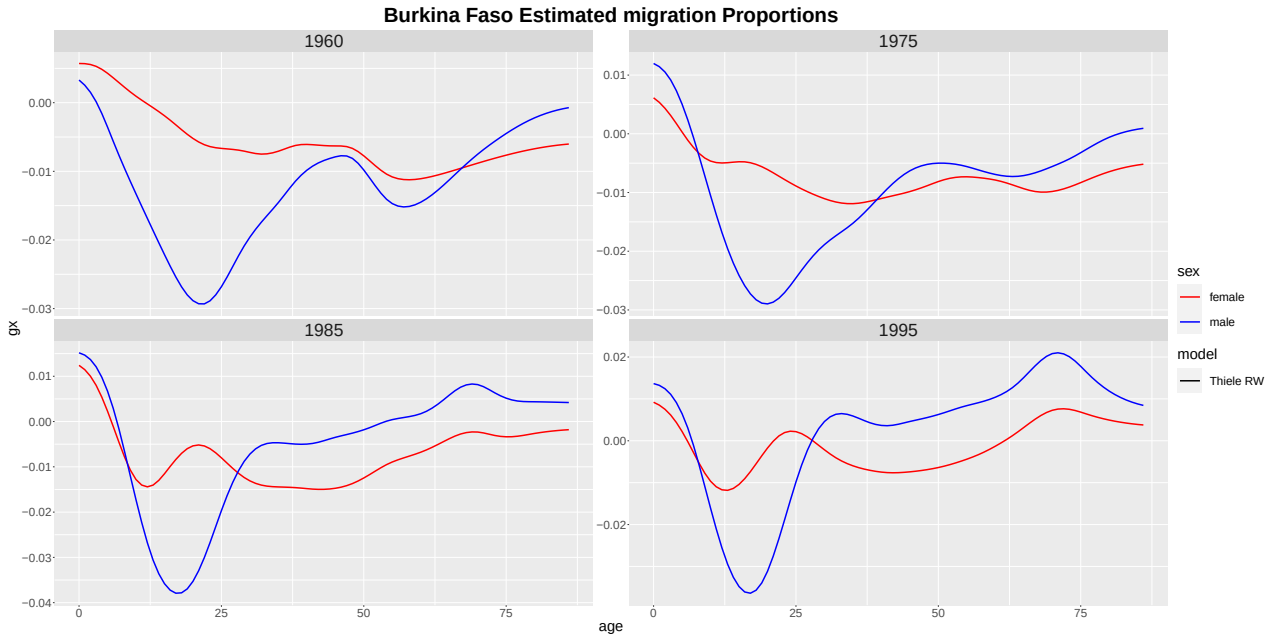

Figure 14: Migration

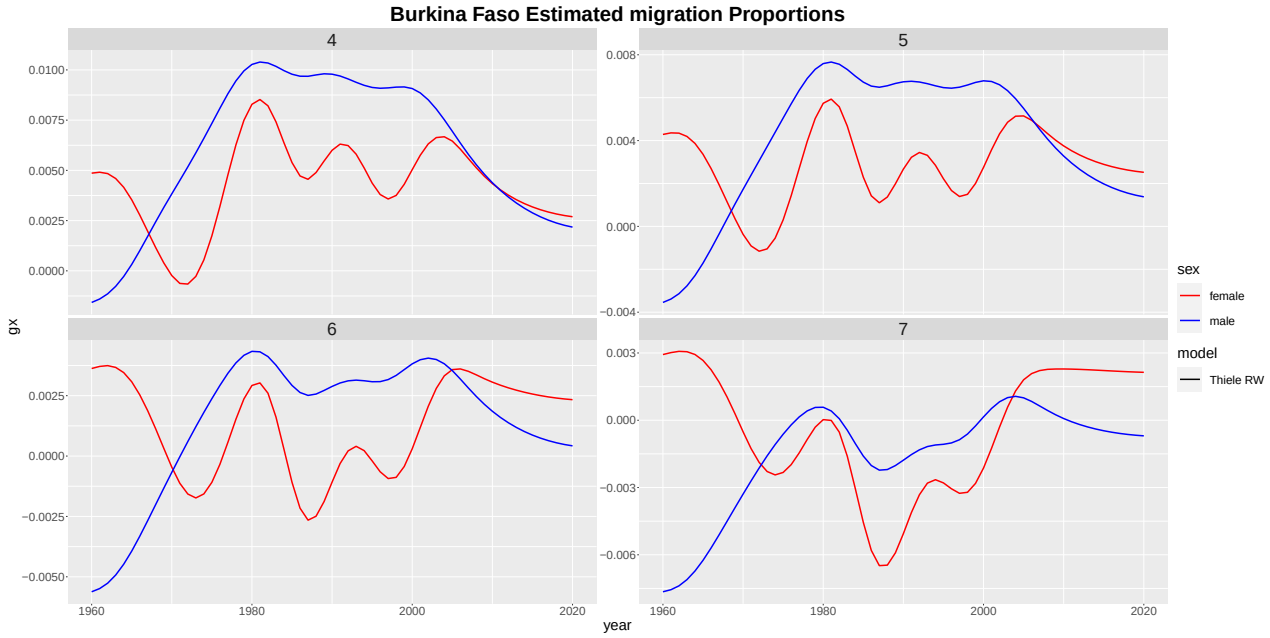

Figure 15: Migration

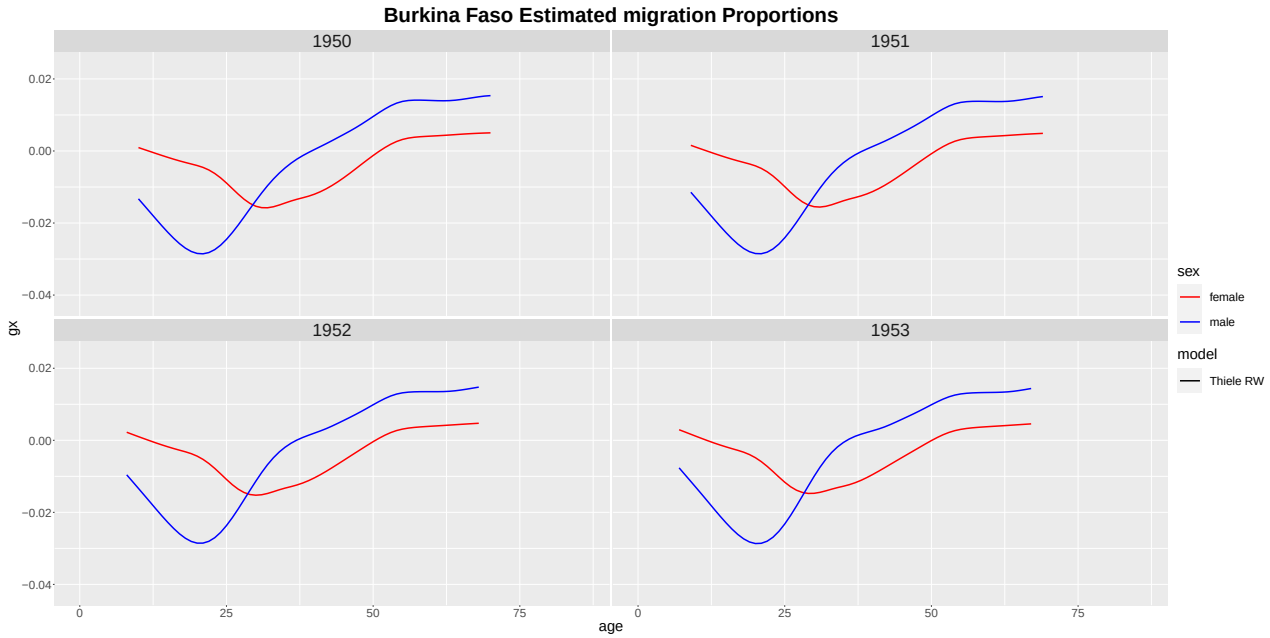

Figure 16: Migration

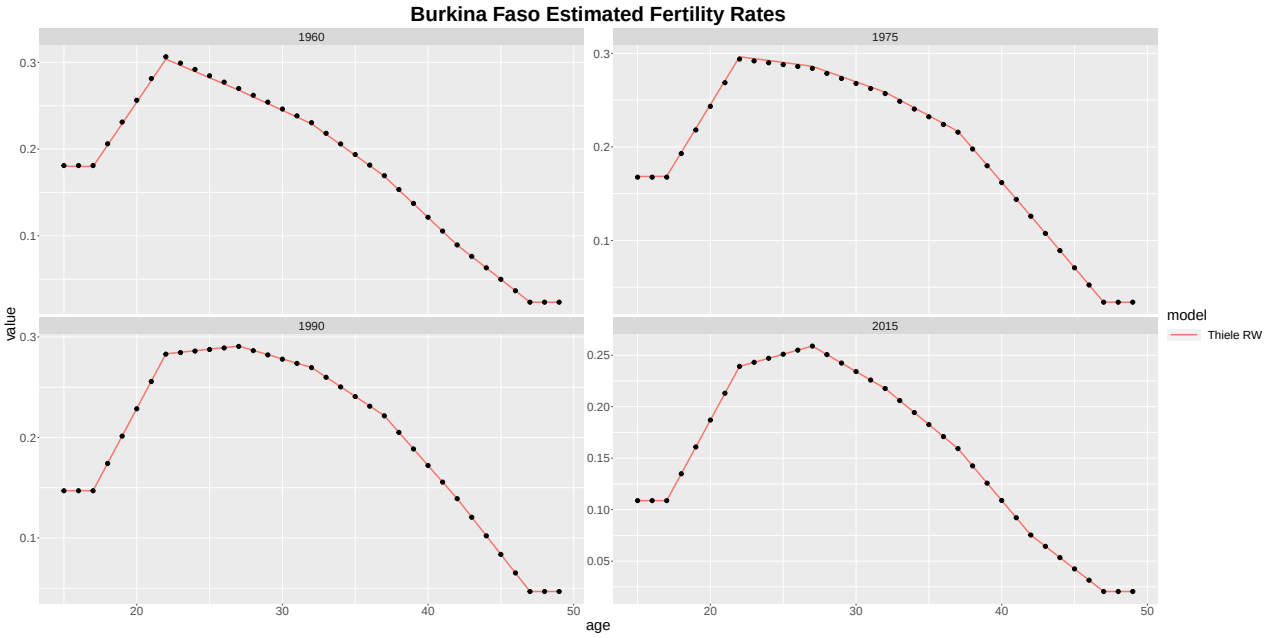

Figure 17: Fertility

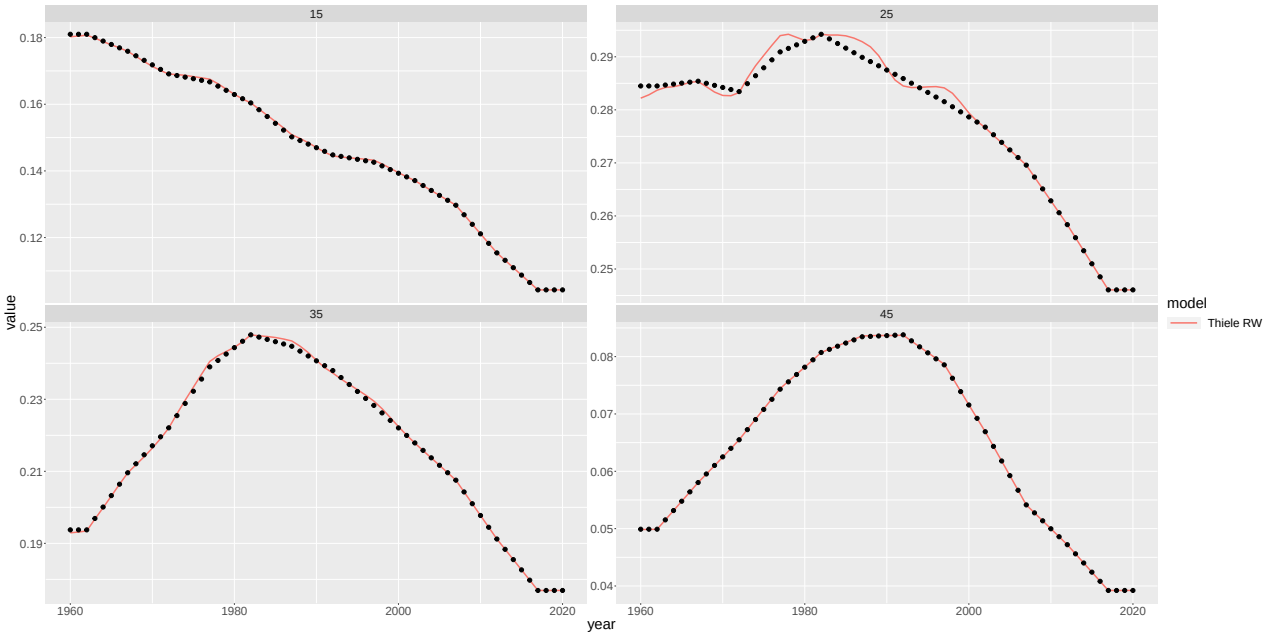

Figure 18: Fertility

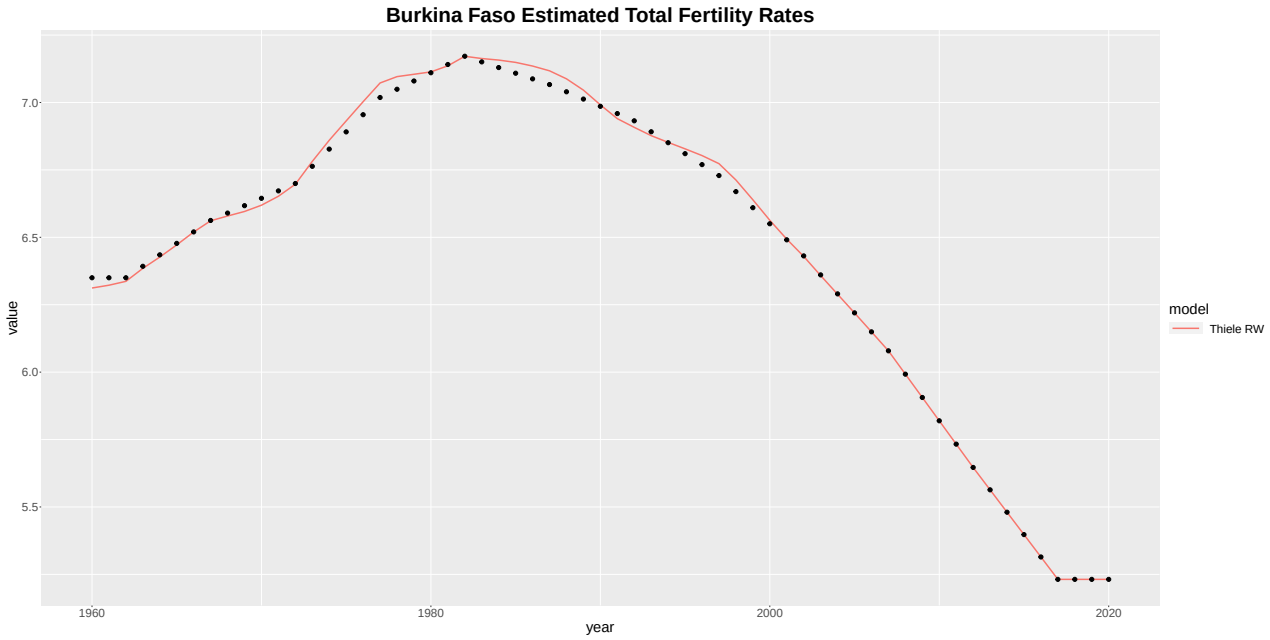

Figure 19: Total Fertility