

Mozambique

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

## # A tibble: 87 x 4
##   age `1980` `1997` `2007`
##   <dbl> <dbl> <dbl> <dbl>
## 1     0 187097. 271698 367263.
## 2     1 202640. 269118 369941.
## 3     2 214835. 277230 391743.
## 4     3 215746. 273925. 384490.
## 5     4 209772. 262183. 372990.
## 6     5 201806. 246929. 354079.
## 7     6 198361. 238131. 343767.
## 8     7 191065. 229348. 329749.
## 9     8 181391. 219001. 312502.
## 10    9 169379. 205561. 291346.
## # ... with 77 more rows
```

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

## # A tibble: 87 x 4
##   age `1980` `1997` `2007`
##   <dbl> <dbl> <dbl> <dbl>
## 1     0 177885. 263539 360976.
## 2     1 195312. 264234. 365324.
## 3     2 205820. 270084. 382294.
## 4     3 207561. 268142. 375980.
## 5     4 201857. 257593. 365010.
## 6     5 195816. 244307. 347339.
## 7     6 194365. 236931. 337781.
## 8     7 189866. 229926. 325071.
## 9     8 183801. 222365. 310226.
## 10    9 175292. 211317. 291350.
## # ... 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_
##	6.4219894	5.3064165	6.4811994	5
##	log_tau2_gx_m	log_lambda_gx_age_f	log_lambda_gx_age_m	log_lambda_g
##	3.4561045	7.8411051	8.0081229	7
##	log_lambda_gx_agemtime_m	log_lambda_tp	log_lambda_tp_0_inflated_sd	log_disp
##	6.9077541	3.5756444	-2.7975619	0
##	log_marginal_prec_psi_f	log_marginal_prec_A_f	log_marginal_prec_B_f	log_marginal_pr
##	4.3156812	6.8059091	3.8680761	4
##	log_marginal_prec_B_m	log_lambda_phi_f	log_lambda_psi_f	log_lambda_
##	4.5592599	4.3807642	4.3495085	4
##	log_lambda_A_f	log_lambda_B_f	log_lambda_phi_m	log_lamb
##	4.3055700	3.0288335	4.4703839	4
##	log_lambda_epsilon_m	log_lambda_A_m	log_lambda_B_m	
##	3.3339881	4.3054518	3.5550309	

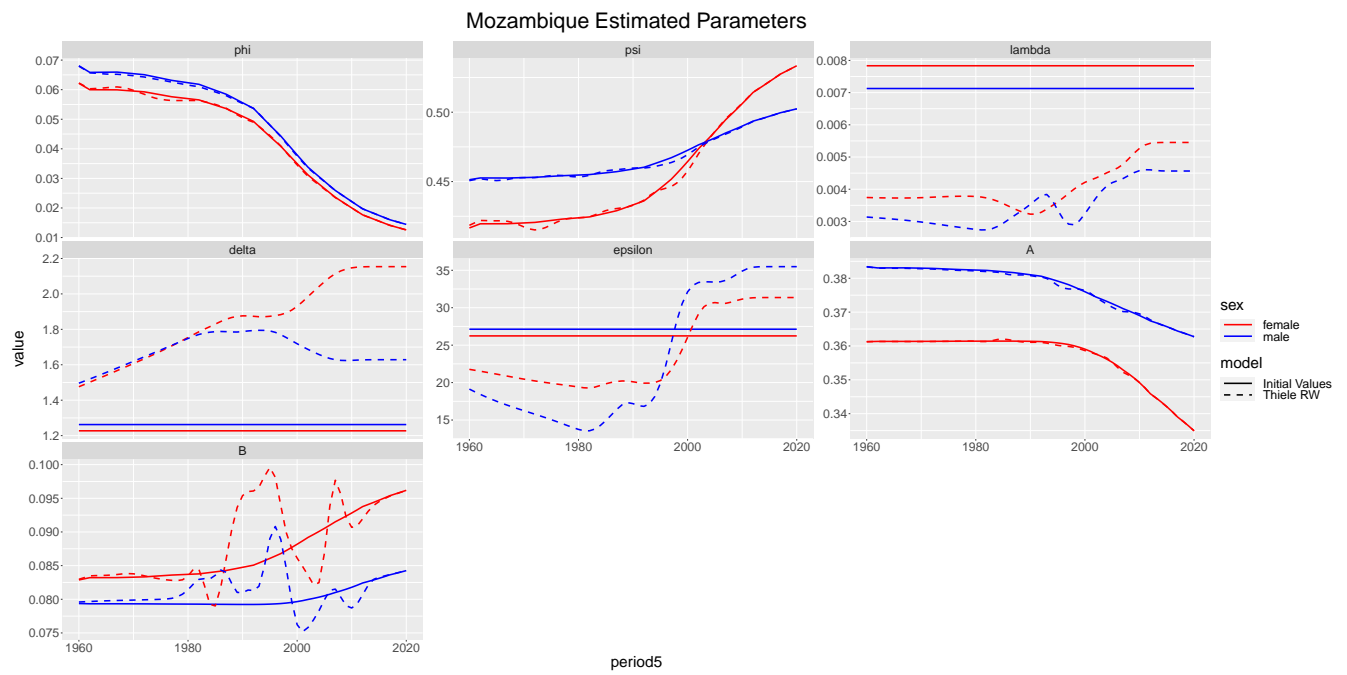


Figure 1: Estimated parameters

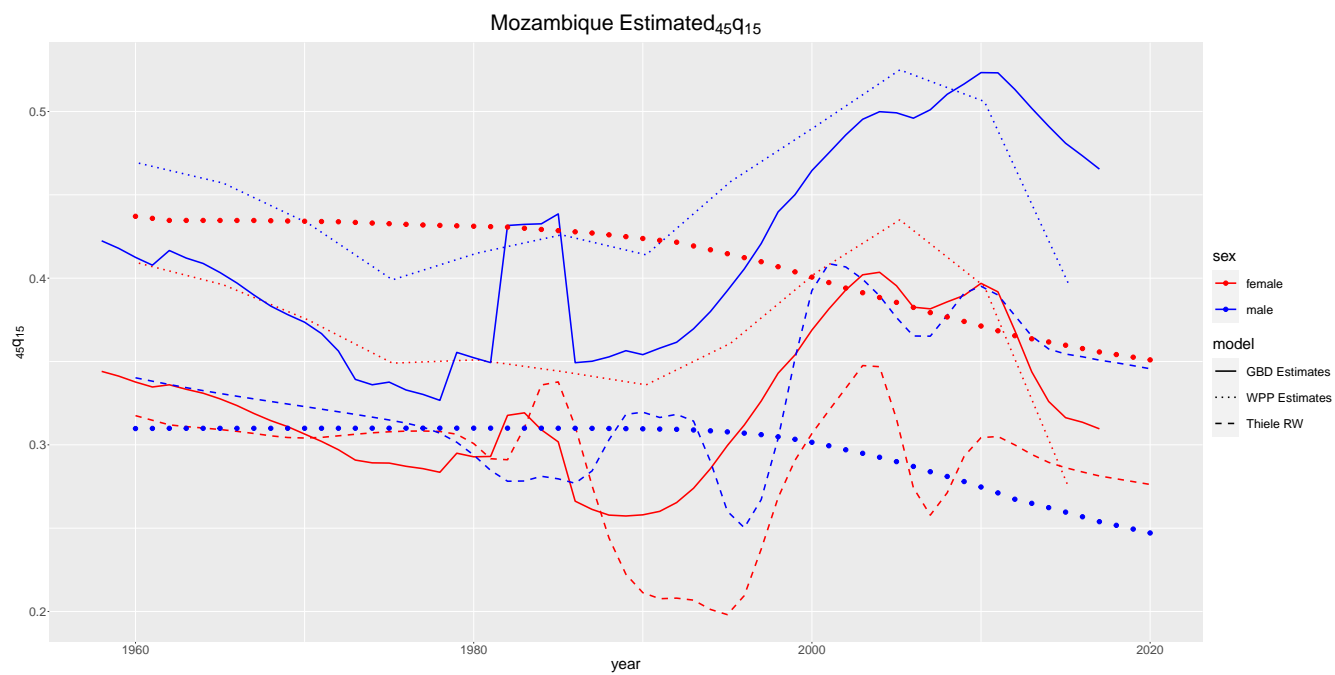


Figure 2: Estimated $_{45}q_{15}$

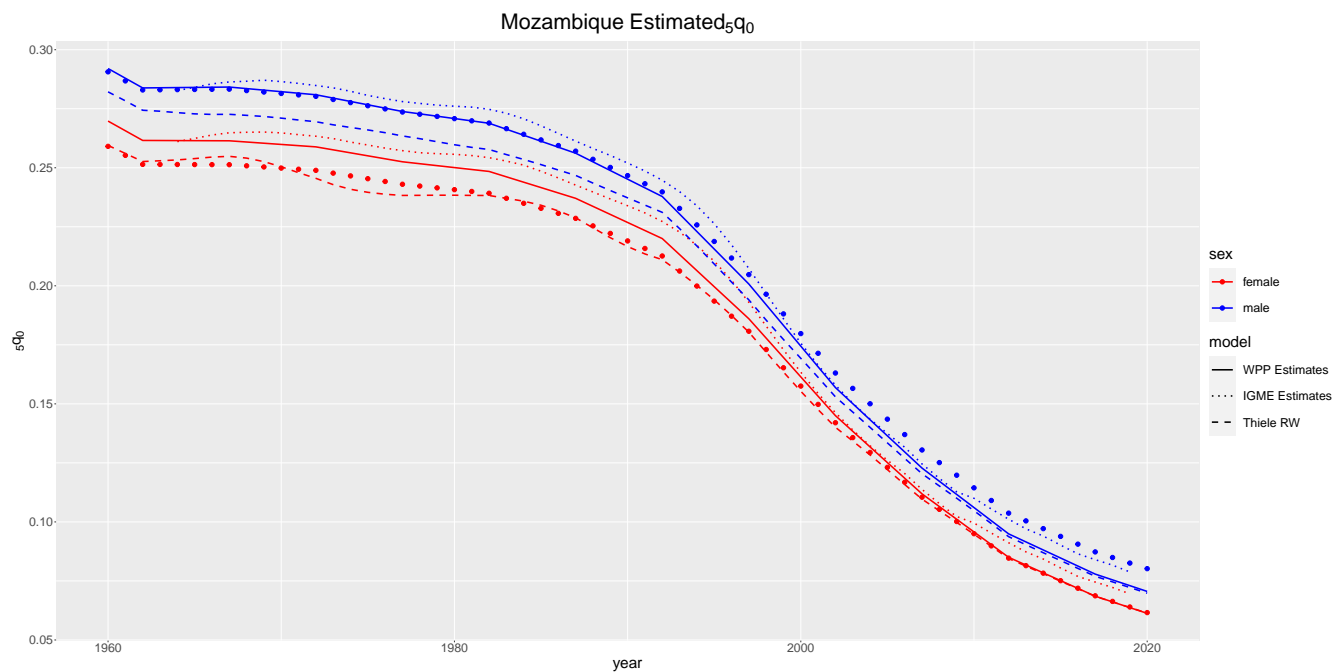


Figure 3: Estimated ${}_5q_0$

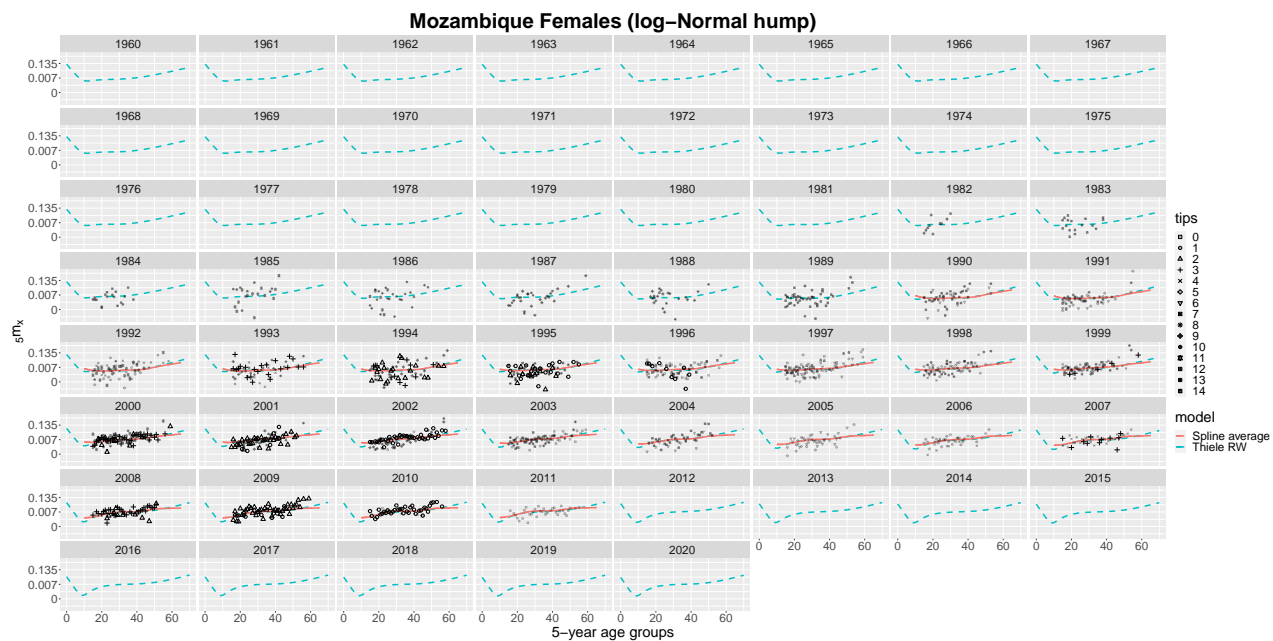


Figure 4: Mortality Schedules

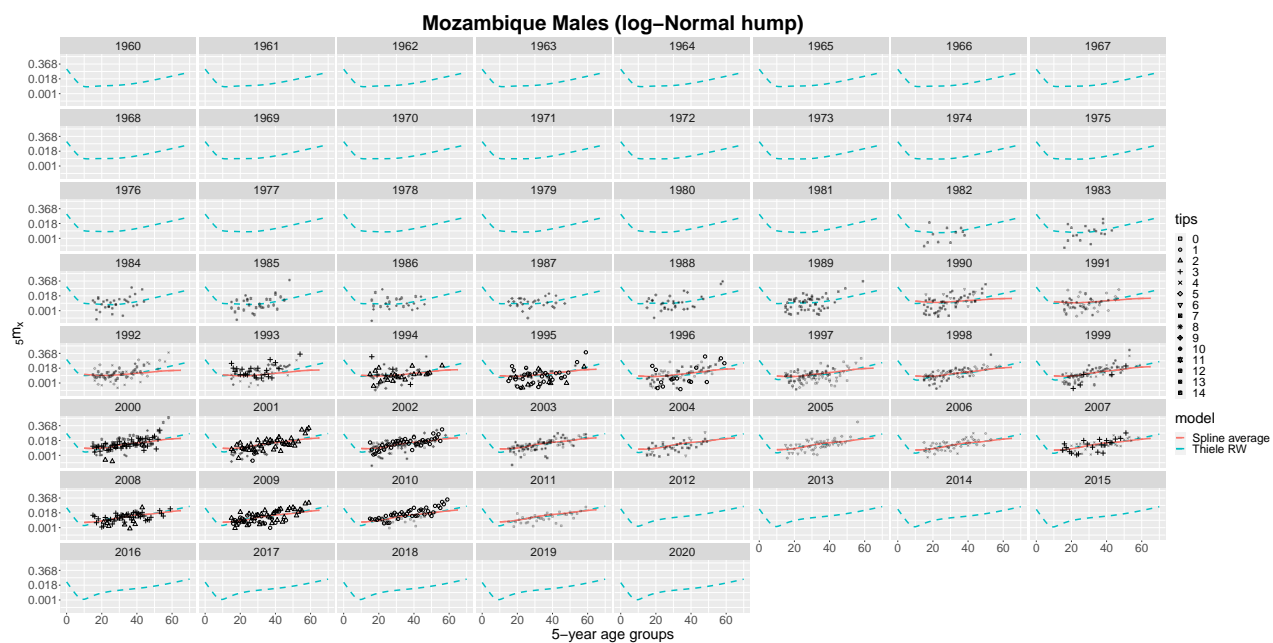


Figure 5: Mortality Schedules

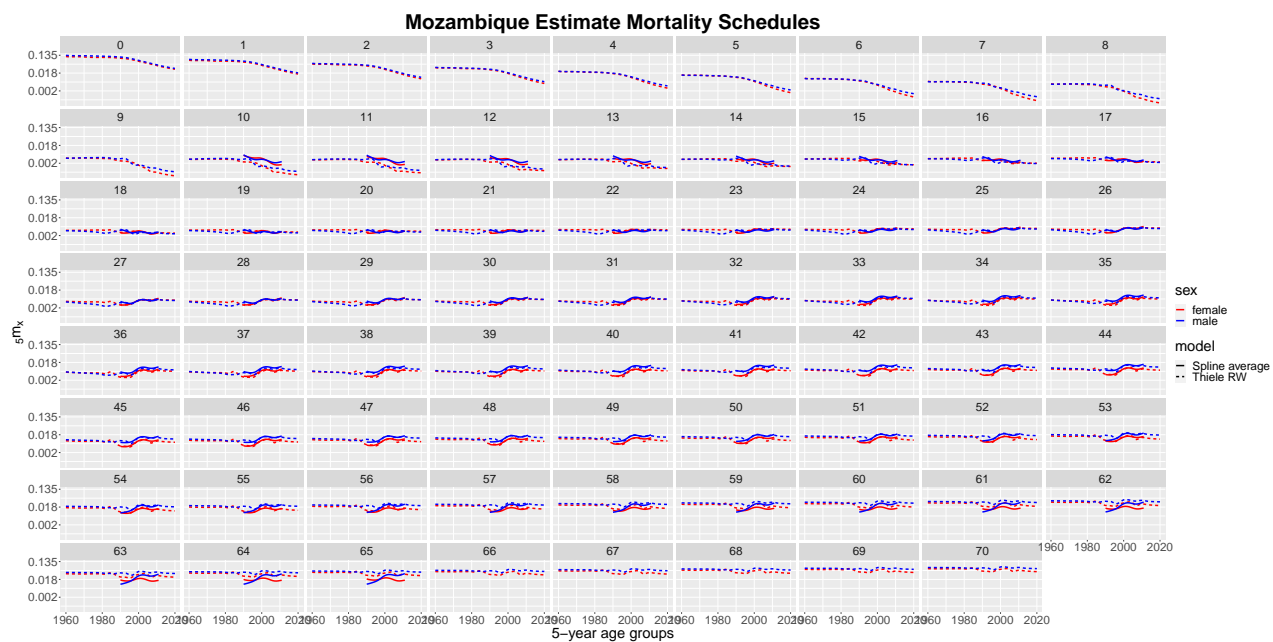


Figure 6: Mortality Schedules

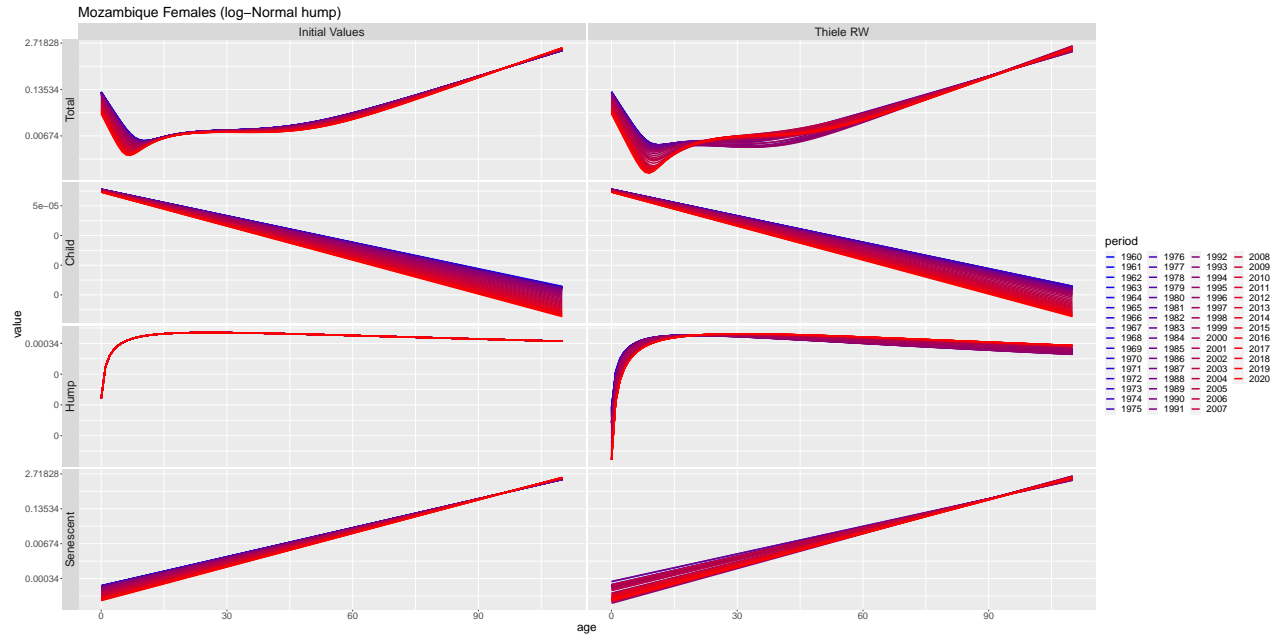


Figure 7: Thiele Decomposed

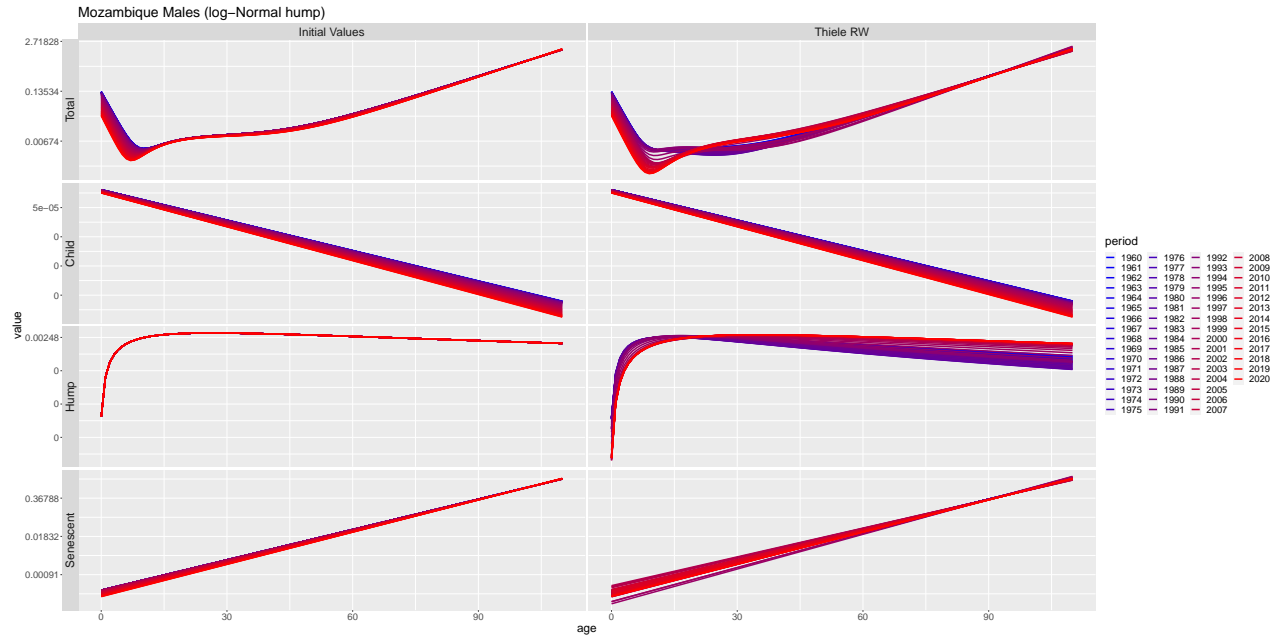


Figure 8: Thiele Decomposed

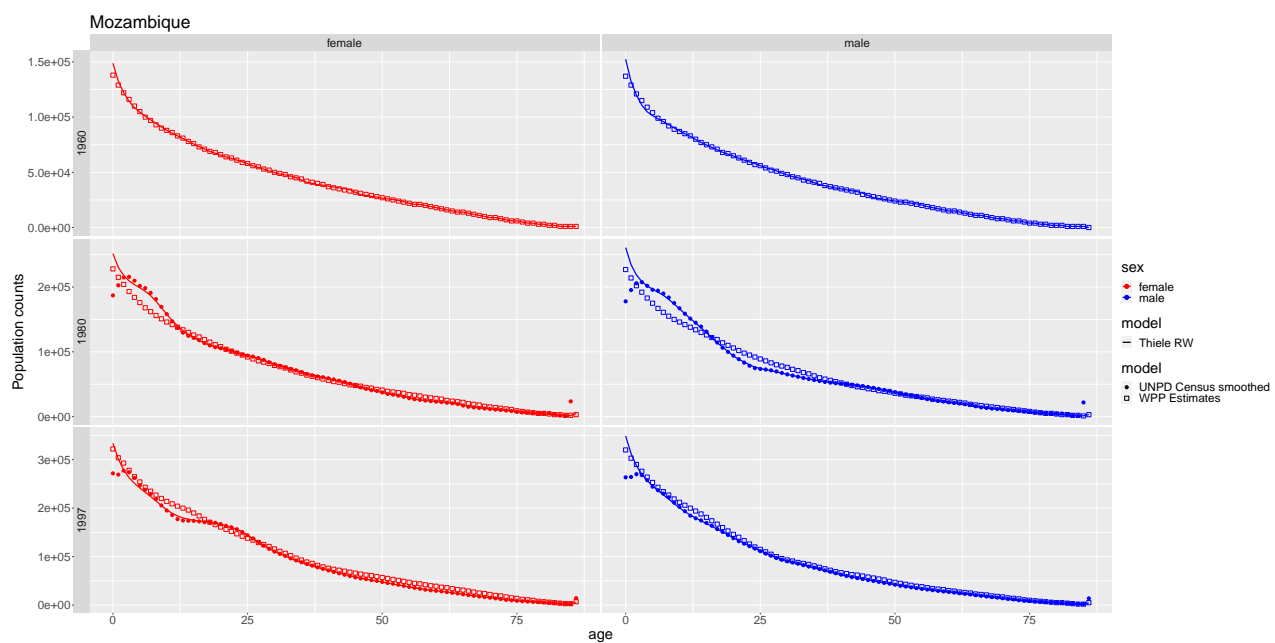


Figure 9: Population

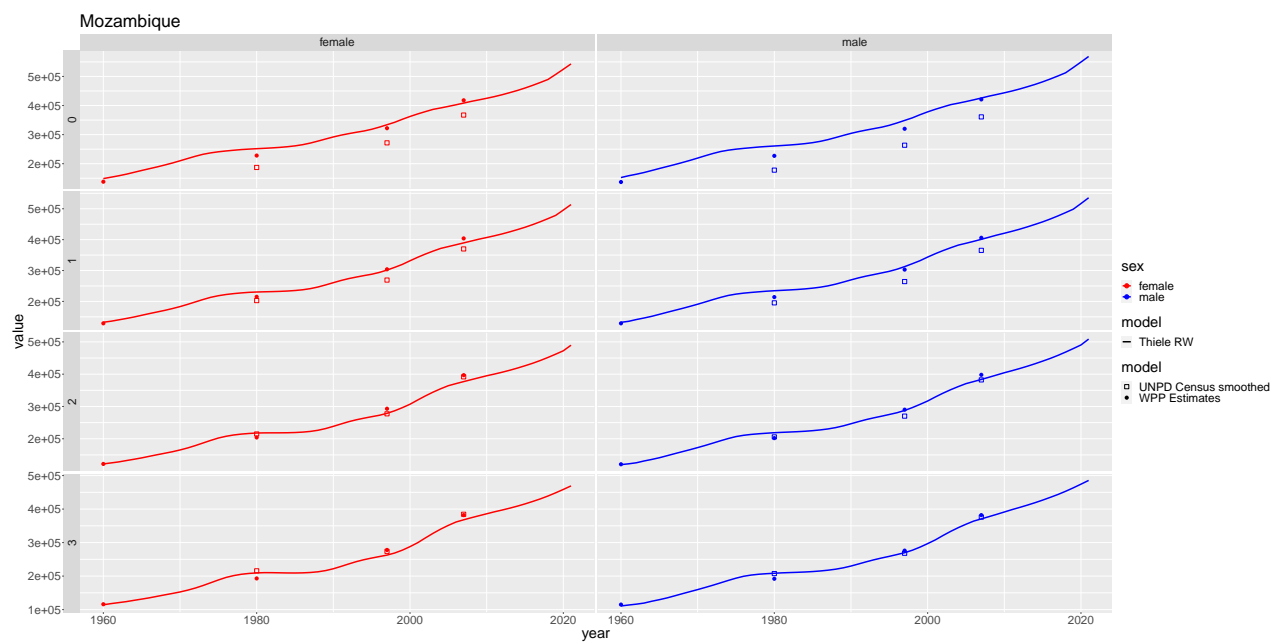


Figure 10: Population

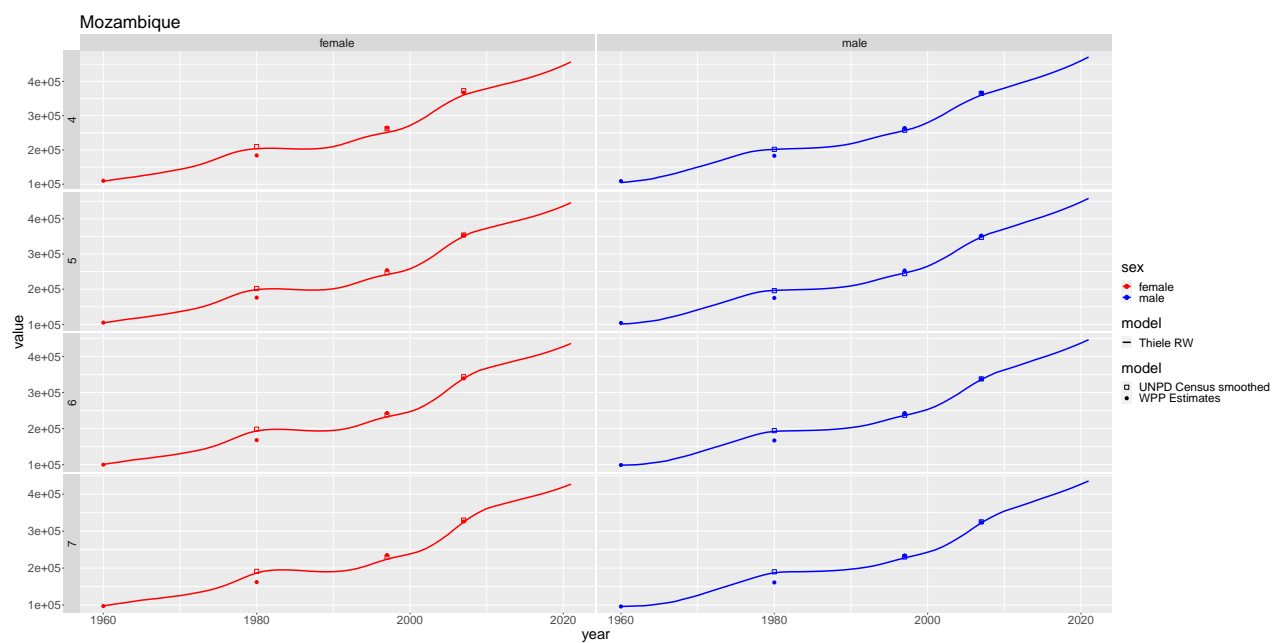


Figure 11: Population

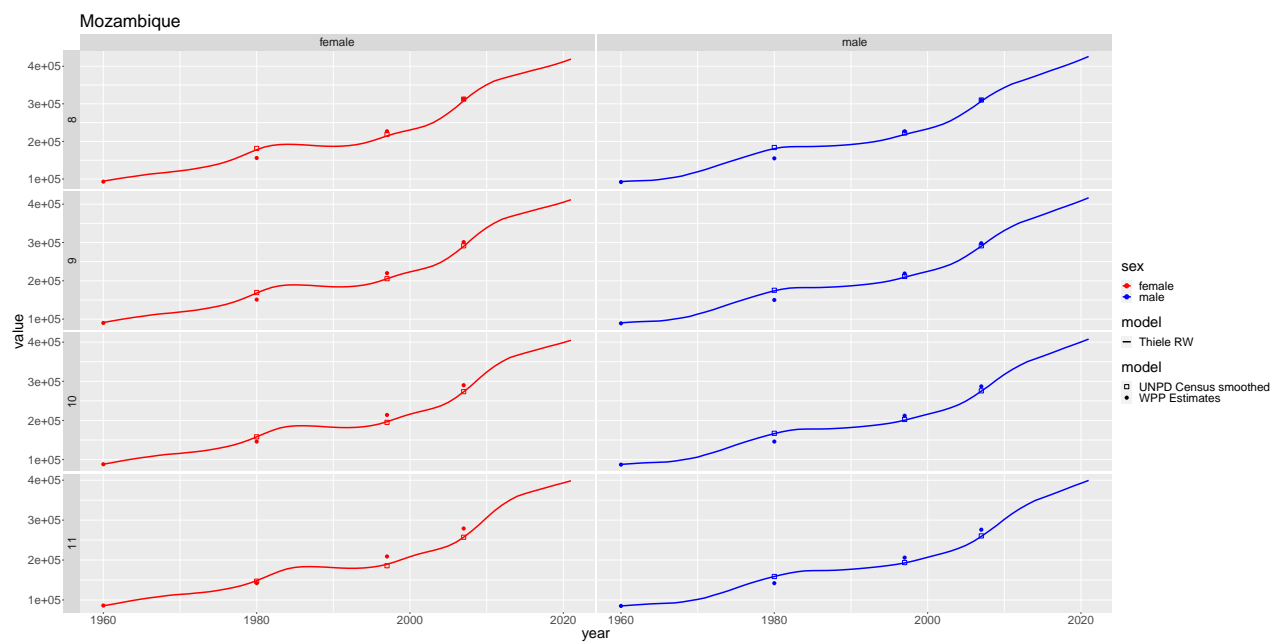


Figure 12: Population

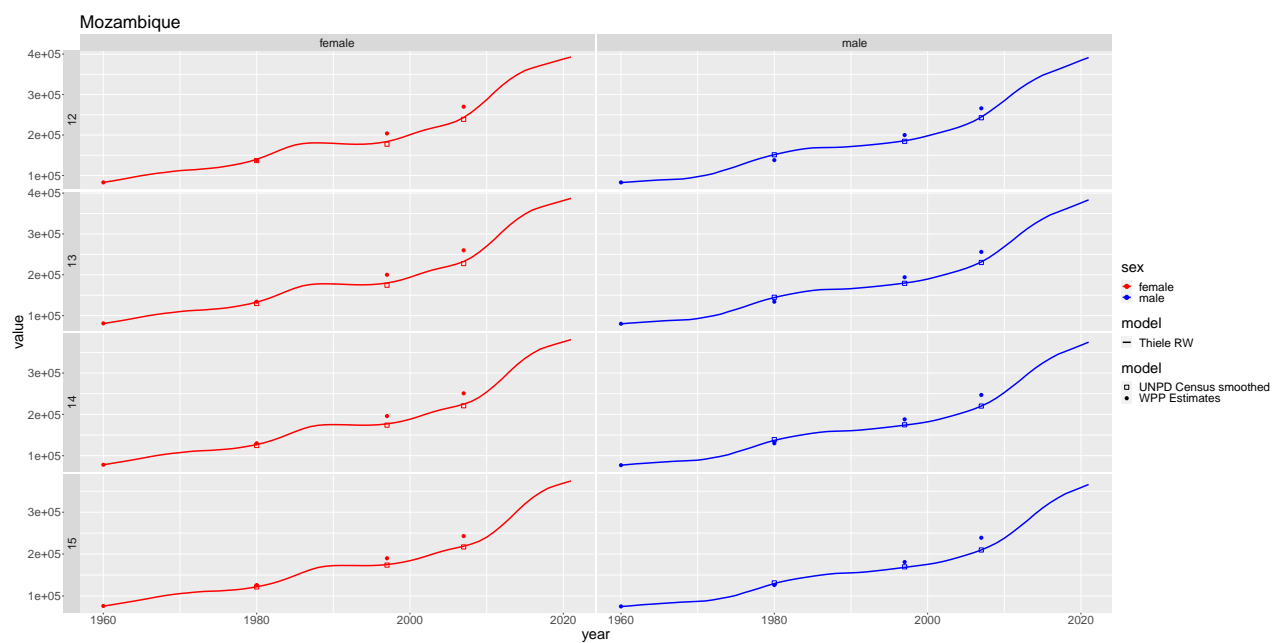


Figure 13: Population

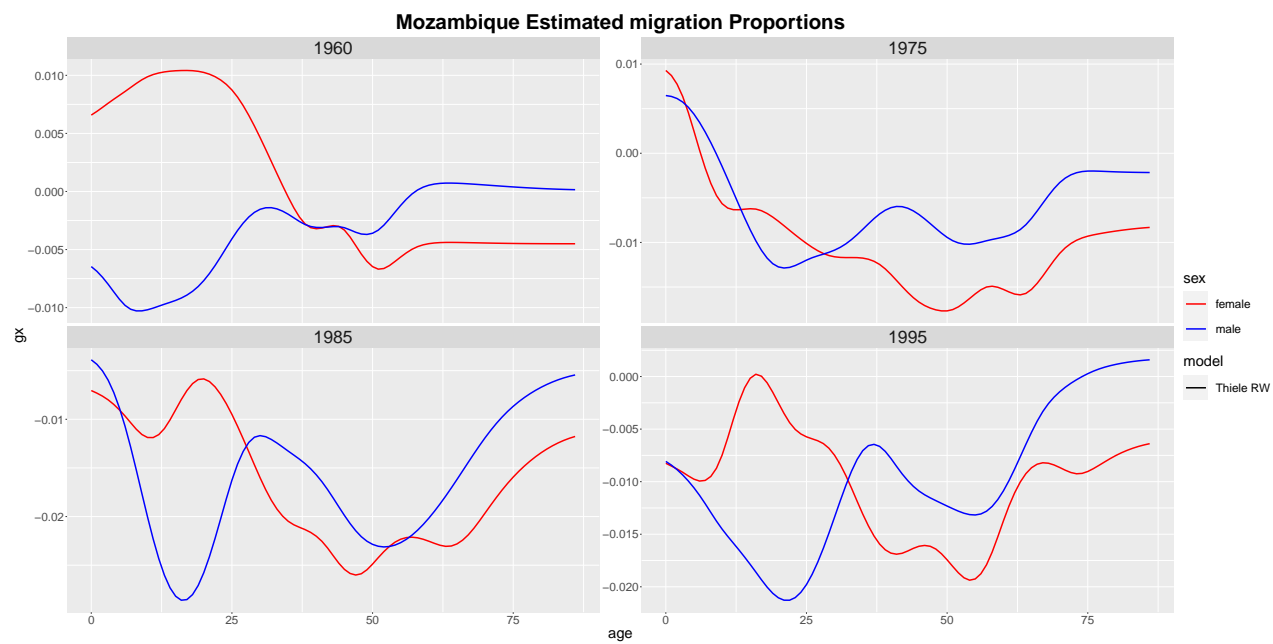


Figure 14: Migration

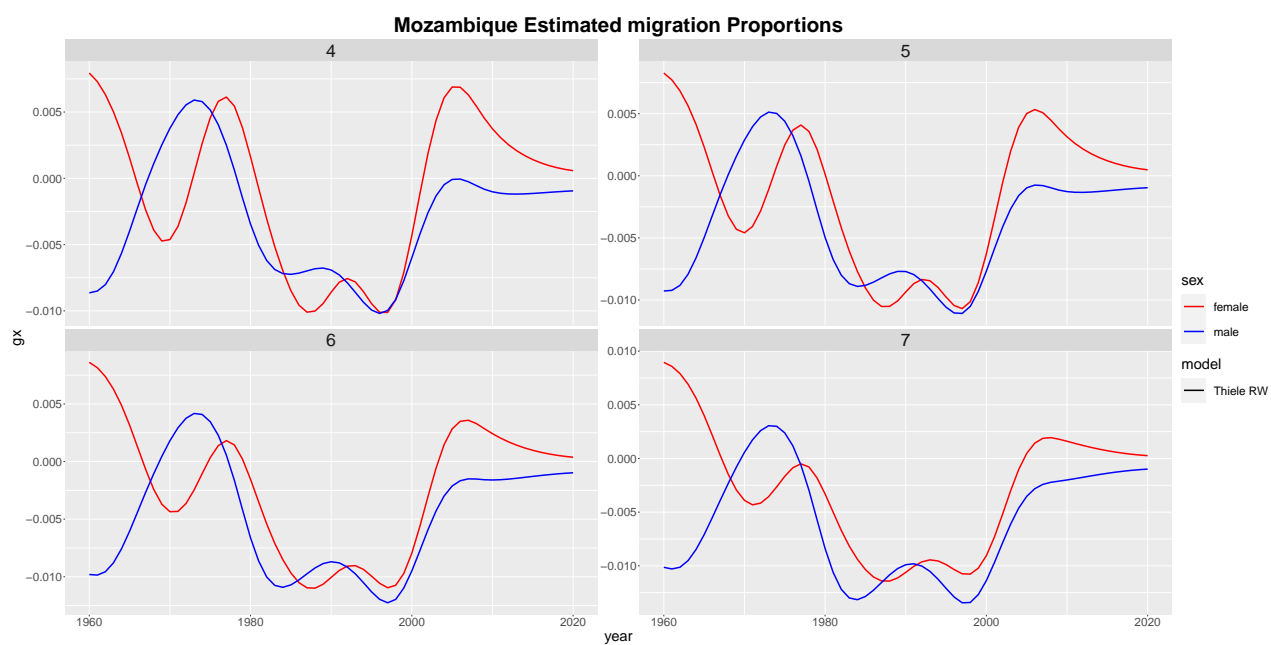


Figure 15: Migration

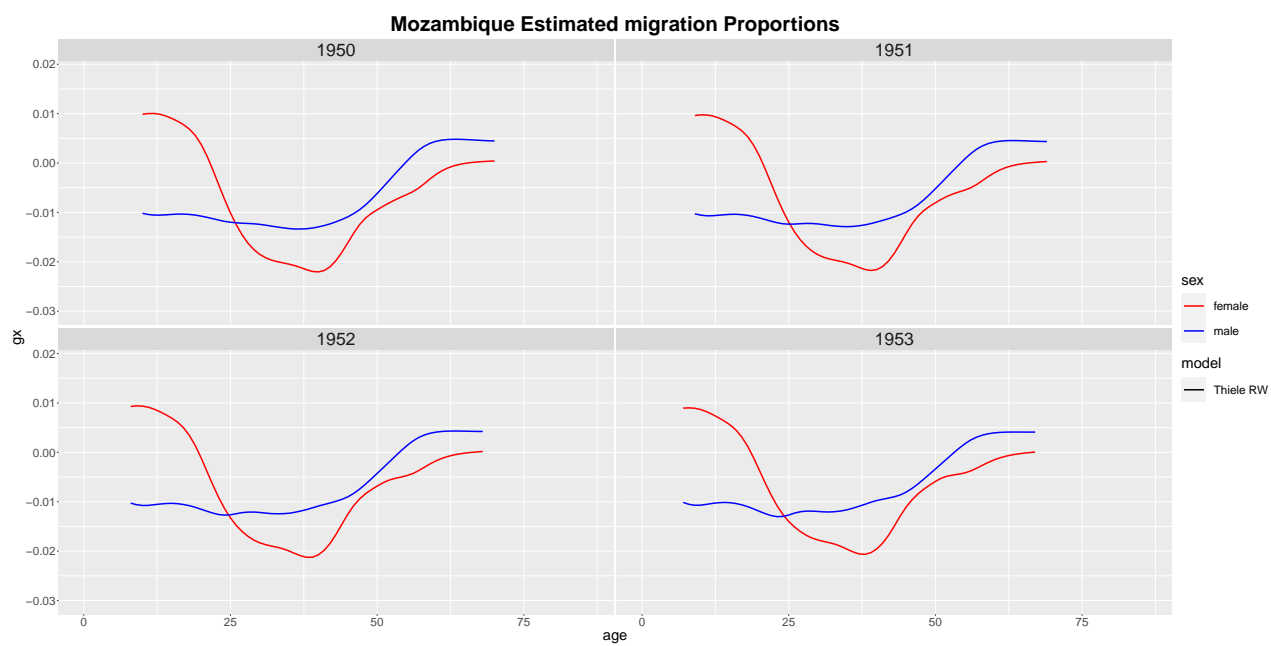


Figure 16: Migration

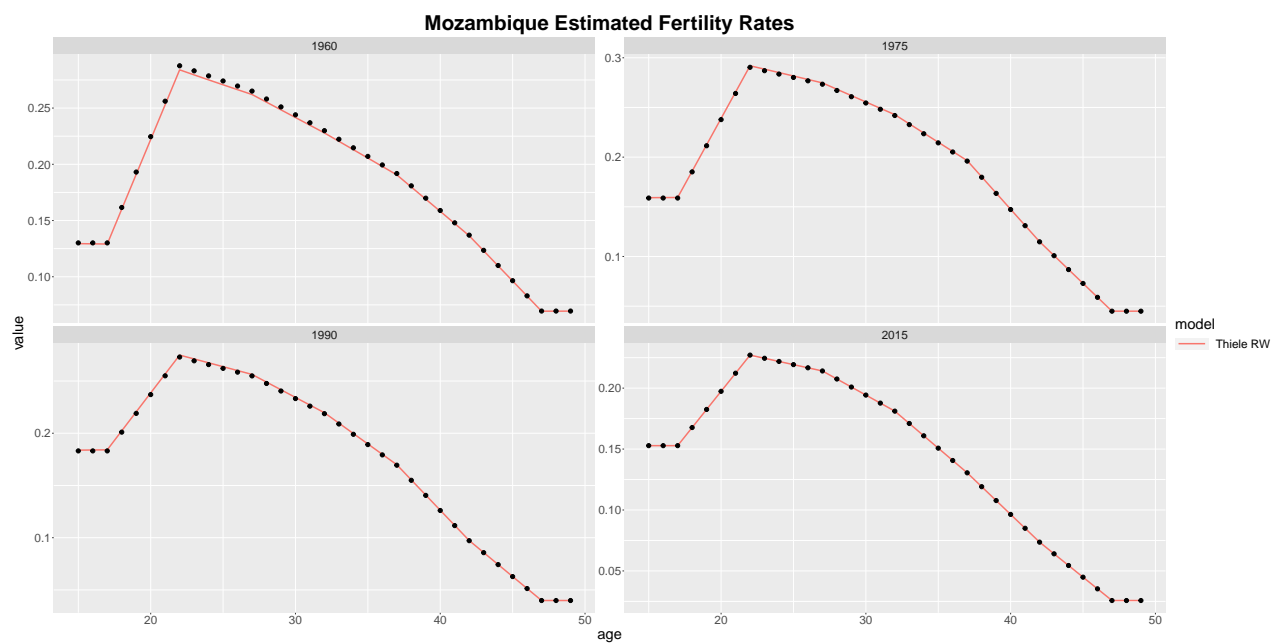


Figure 17: Fertility

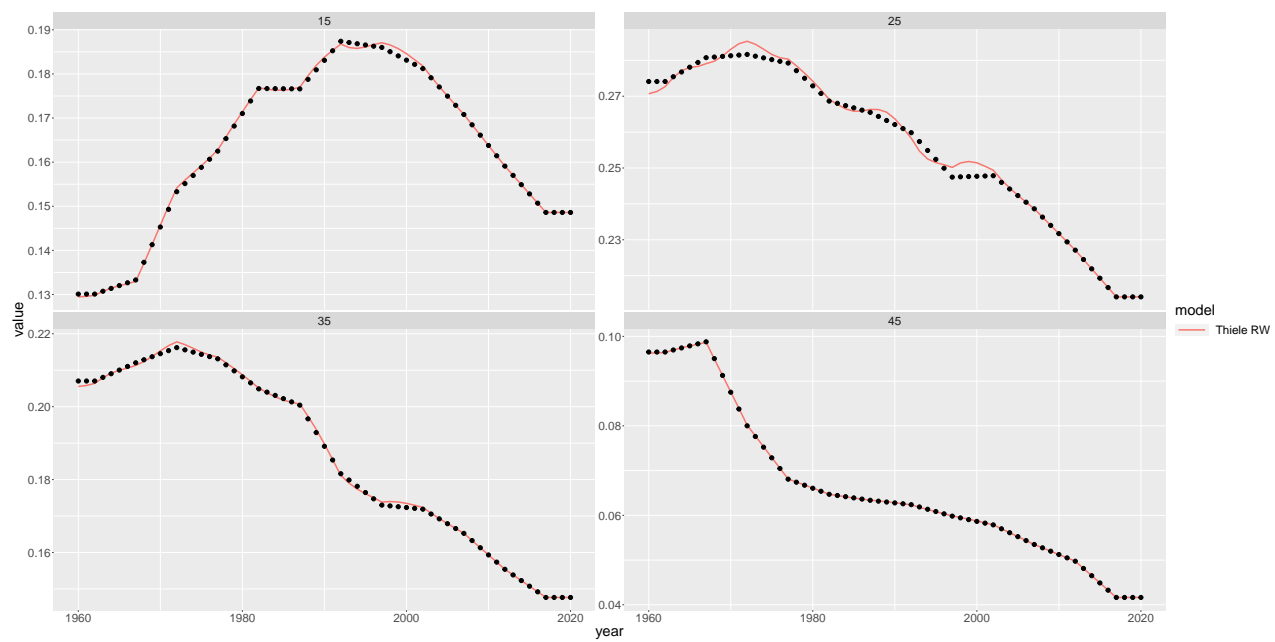


Figure 18: Fertility

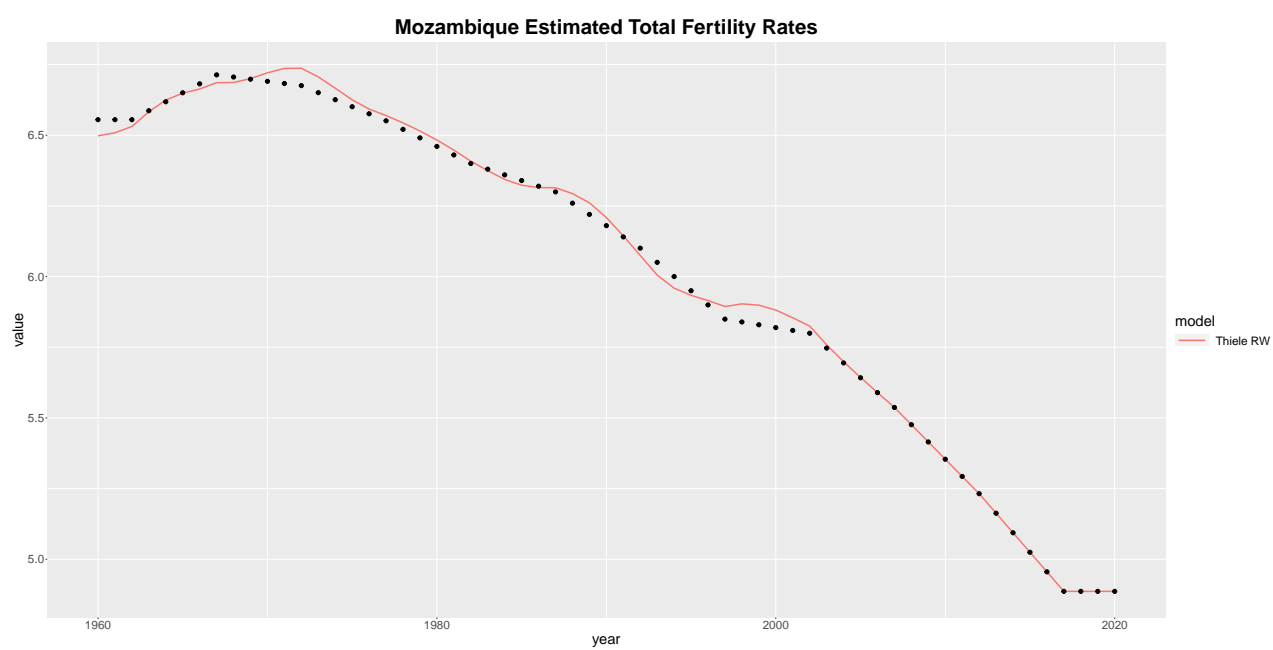


Figure 19: Total Fertility