

# Gambia

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

## # A tibble: 18 x 4
##   aggr.age `1973` `1983` `1993`
## *   <dbl>   <dbl>   <dbl>   <dbl>
## 1       0  41563  58907.  84738.
## 2       5  32722  51790.  78245.
## 3      10  28776  40376.  66020.
## 4      15  26267  33801.  55768.
## 5      20  22723  32666.  49818.
## 6      25  19208  30671.  44550.
## 7      30  16072  24542.  35807.
## 8      35  13316  17901.  26473.
## 9      40  10972  13703.  19807.
## 10     45   9005  10504.  14542.
## 11     50   7169   7968.  10650.
## 12     55   5534   6007.   8081.
## 13     60   4004   4853.   6742.
## 14     65   2756   3772.   5340.
## 15     70   1671   2740.   3912.
## 16     75    894   2128.   2900.
## 17     80    338   2199.   2065.
## 18     85    123   1982.   3121.
```

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

## # A tibble: 18 x 4
##   aggr.age `1973` `1983` `1993`
## *   <dbl>   <dbl>   <dbl>   <dbl>
## 1       0  41216  59160.  86350.
## 2       5  31932  52458.  79005.
## 3      10  28118  40522.  65591.
## 4      15  25827  31264.  53832.
## 5      20  24121  28238.  46618.
## 6      25  21434  26239.  40040.
## 7      30  18192  21919.  32335.
## 8      35  15095  17687.  25870.
## 9      40  12287  14759.  21359.
## 10     45   9638  12170.  17496.
## 11     50   7526   9702.  13833.
## 12     55   5669   7613.  10744.
## 13     60   4036   6255.   8615.
## 14     65   2719   4804.   6432.
## 15     70   1440   3414.   4508.
## 16     75    779   2471.   3126.
## 17     80    274   2228.   2038.
## 18     85     83   2025.   2814.
```

*Thiele log-Normal Hump RW*

```
##   user  system elapsed
##   9.02    0.19     9.14
```

```
## [1] "relative convergence (4)"  
Thiele log-Normal Hump RW (Pop 5-9 to 70-74, DHS 15-19 to 45-49)  
##      user  system elapsed  
##      8.10    0.20    8.32  
## [1] "relative convergence (4)"
```

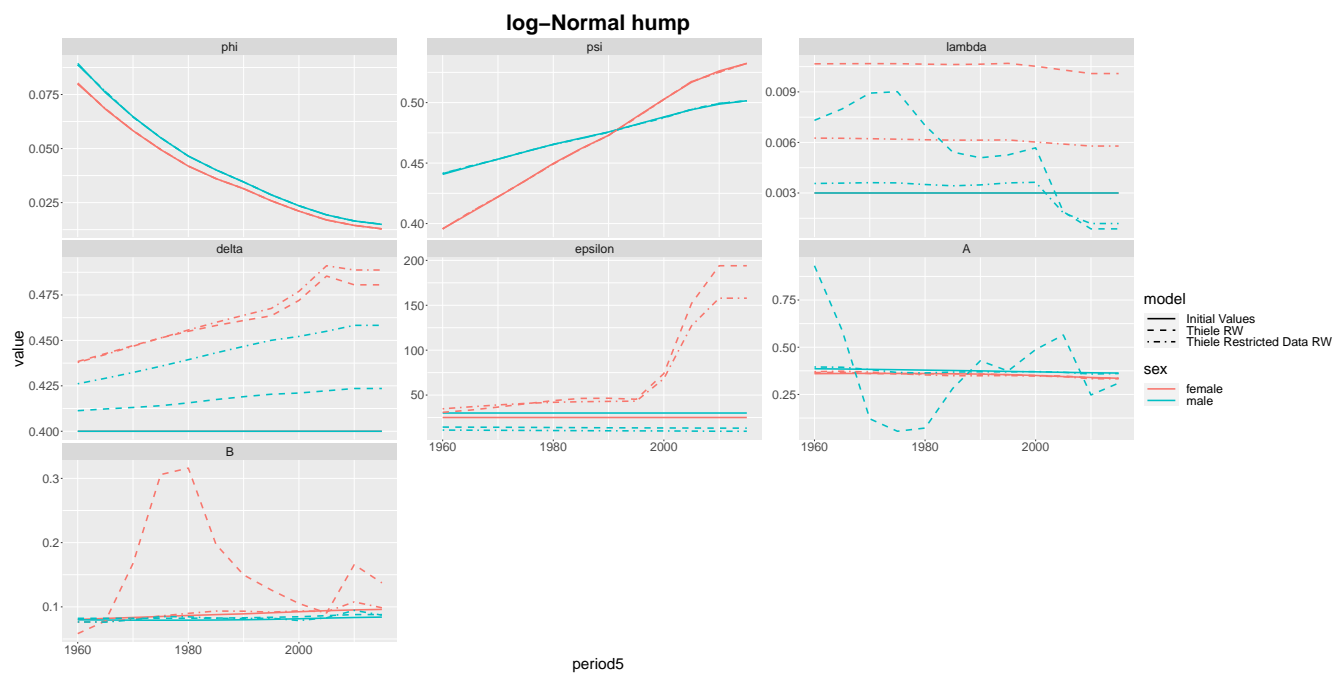


Figure 1: Estimated parameters



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

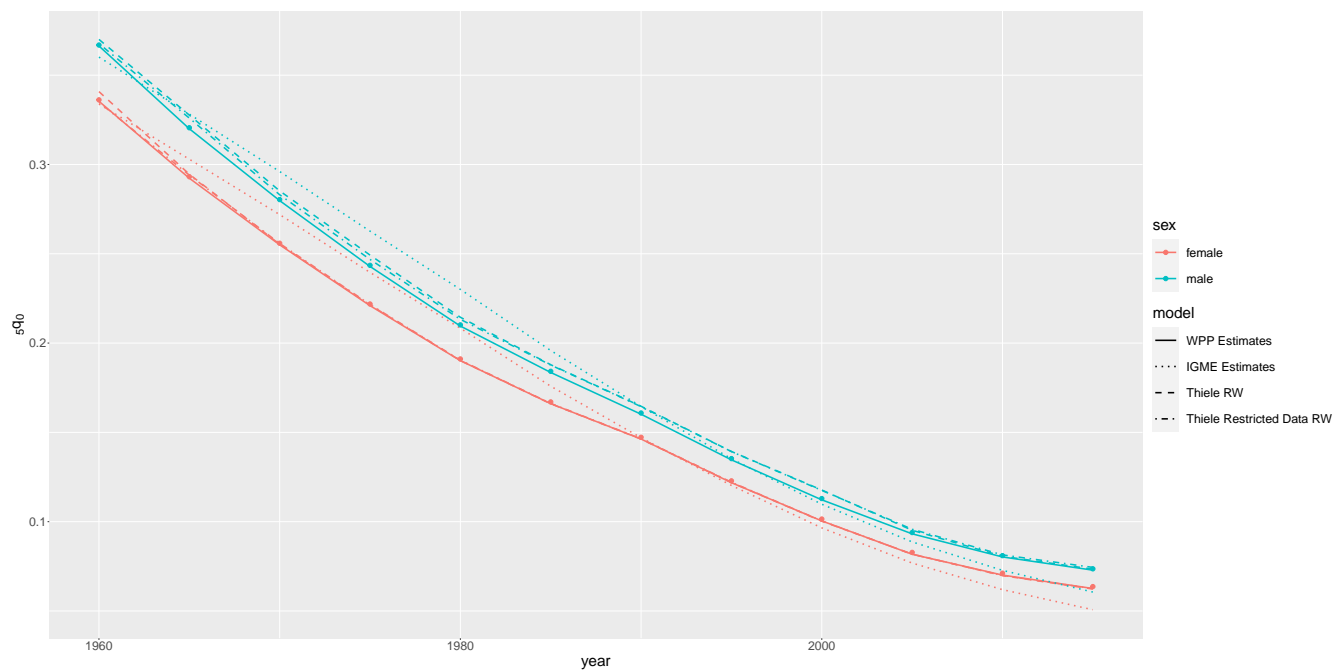


Figure 3: Estimated  $_{5}q_0$

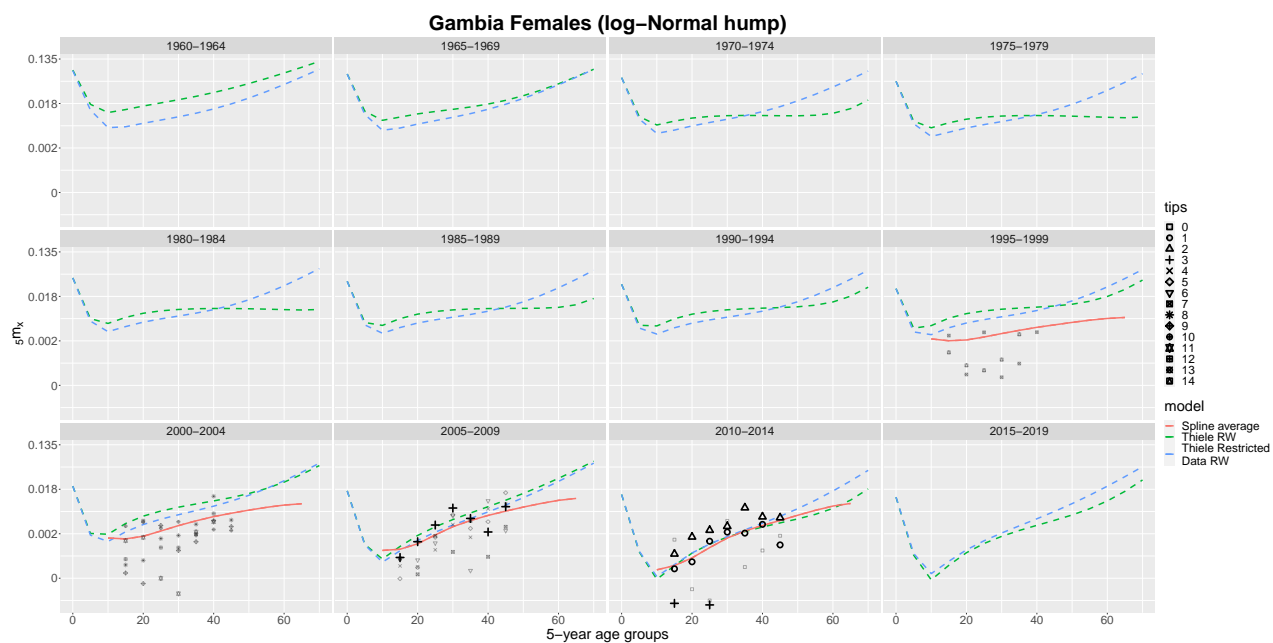


Figure 4: Mortality Schedules

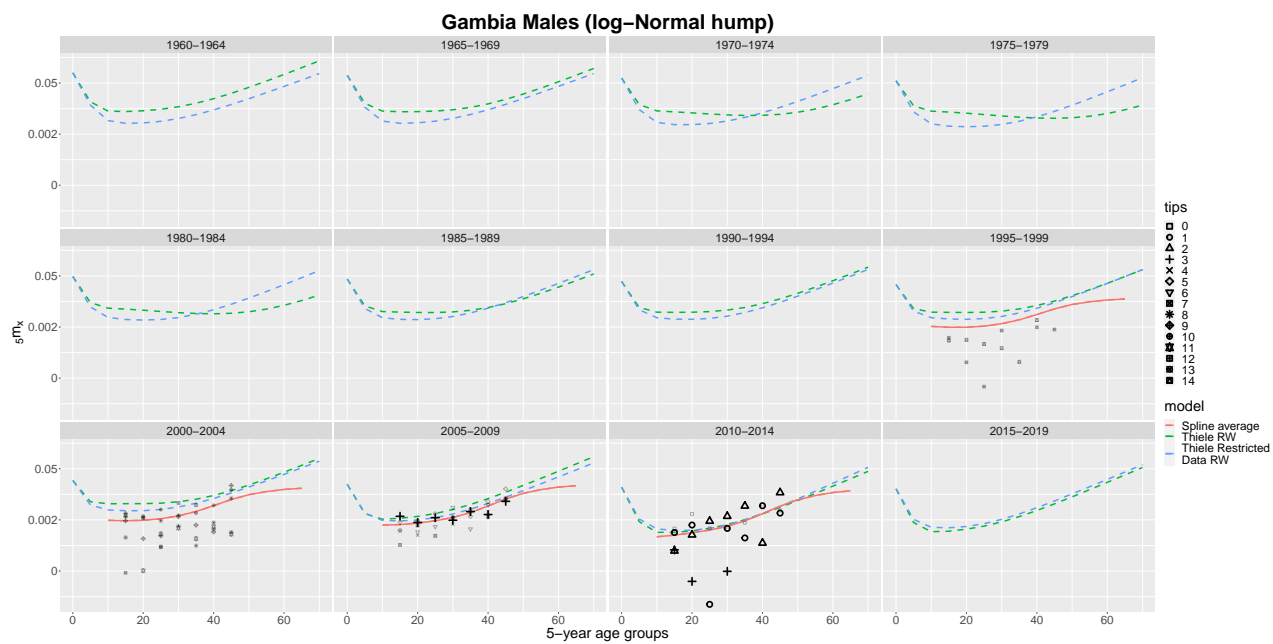


Figure 5: Mortality Schedules

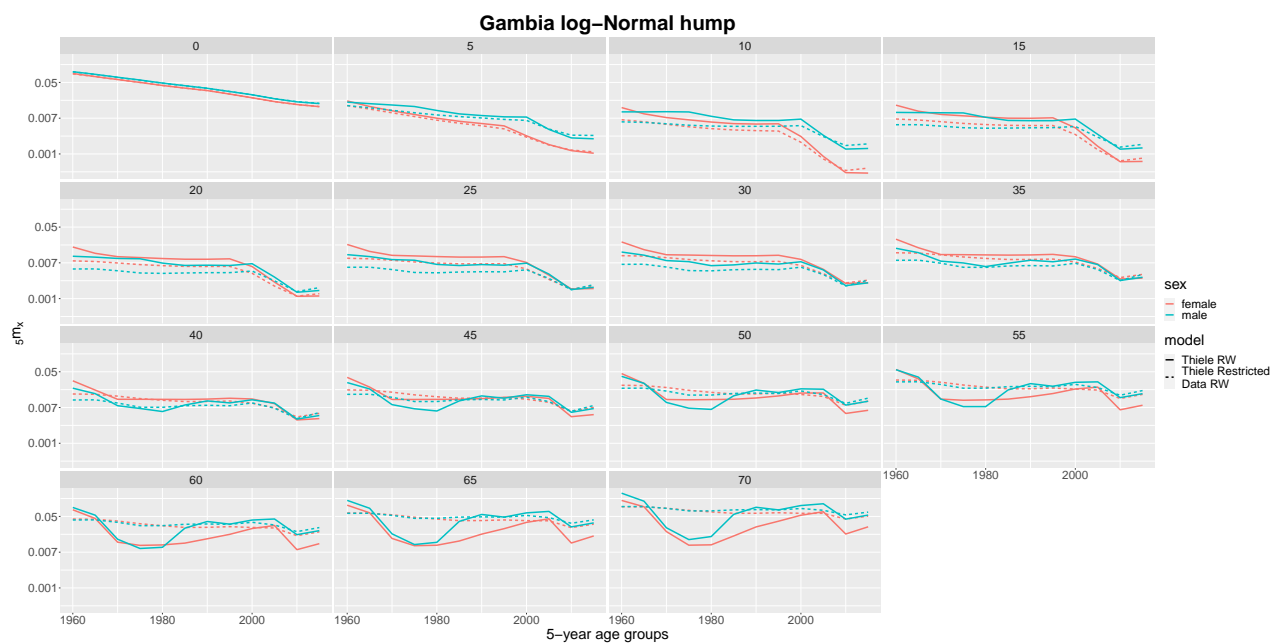


Figure 6: Mortality Schedules

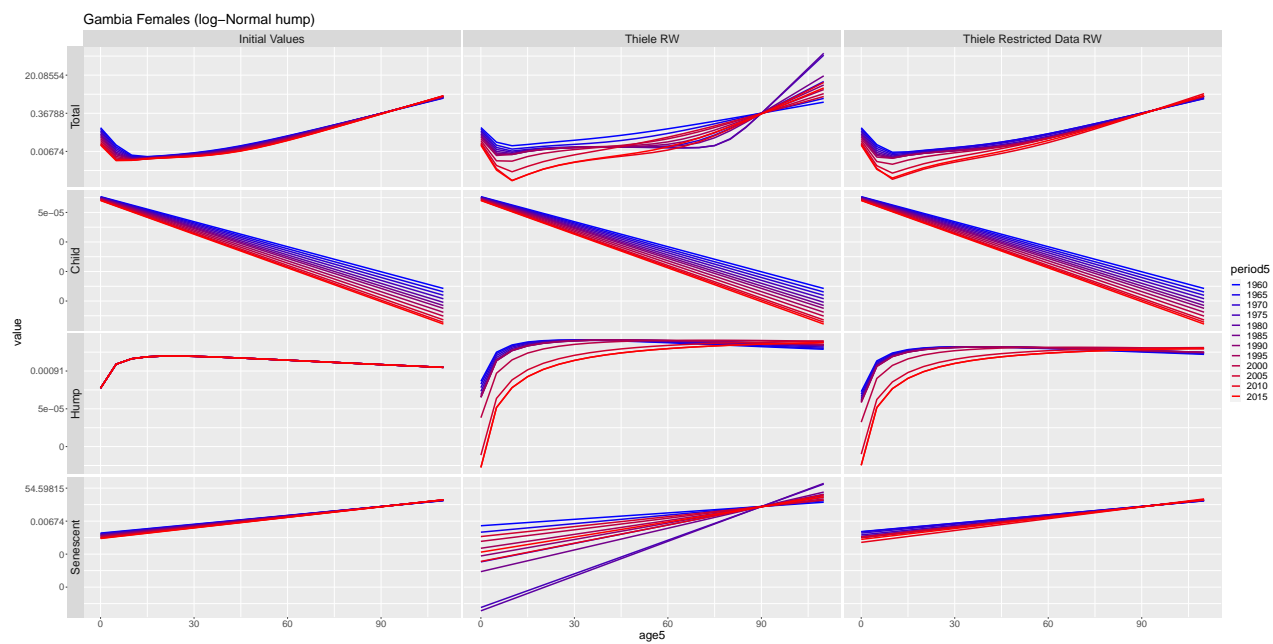


Figure 7: Thiele Decomposed

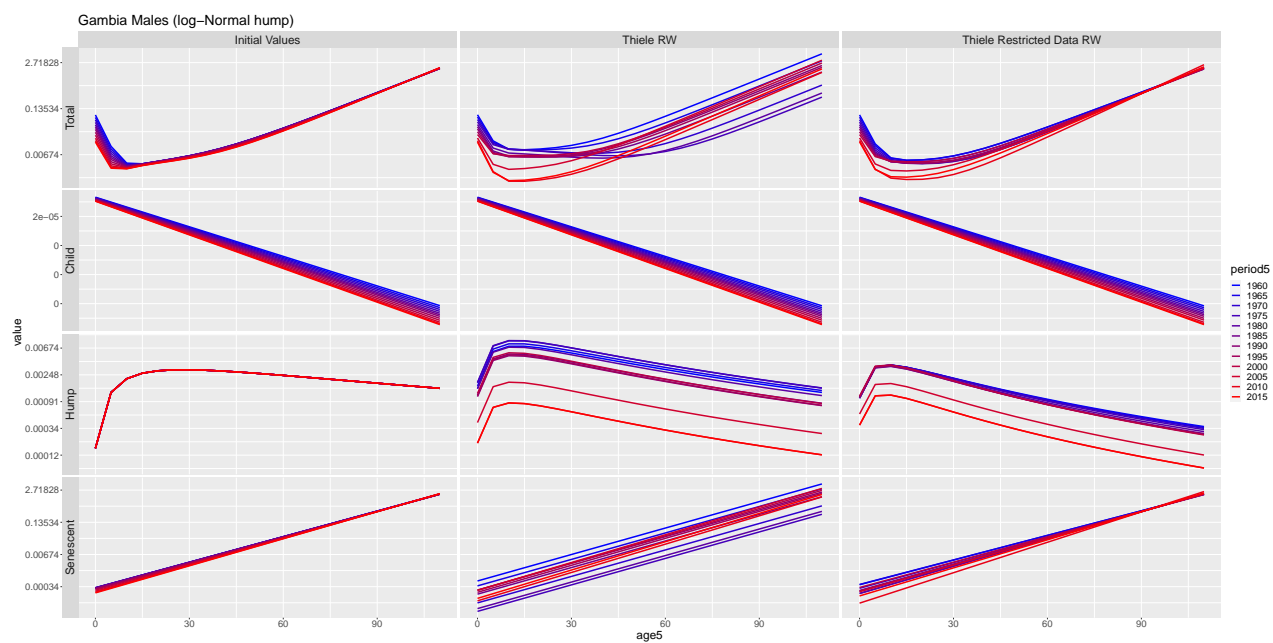


Figure 8: Thiele Decomposed

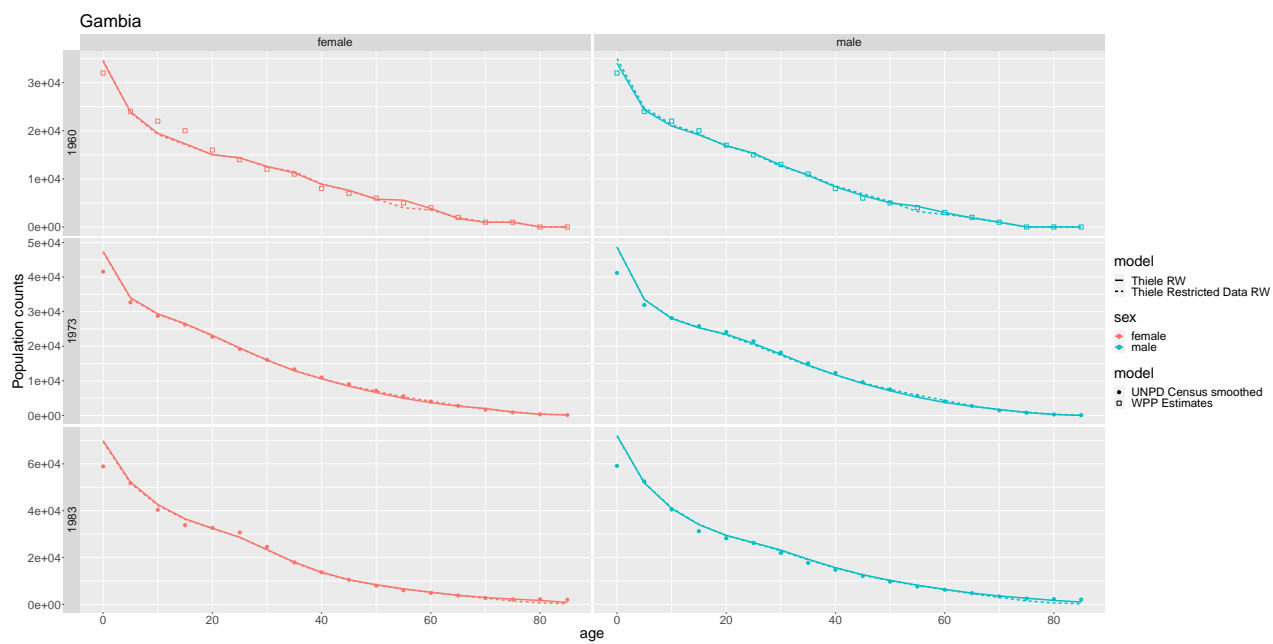


Figure 9: Population

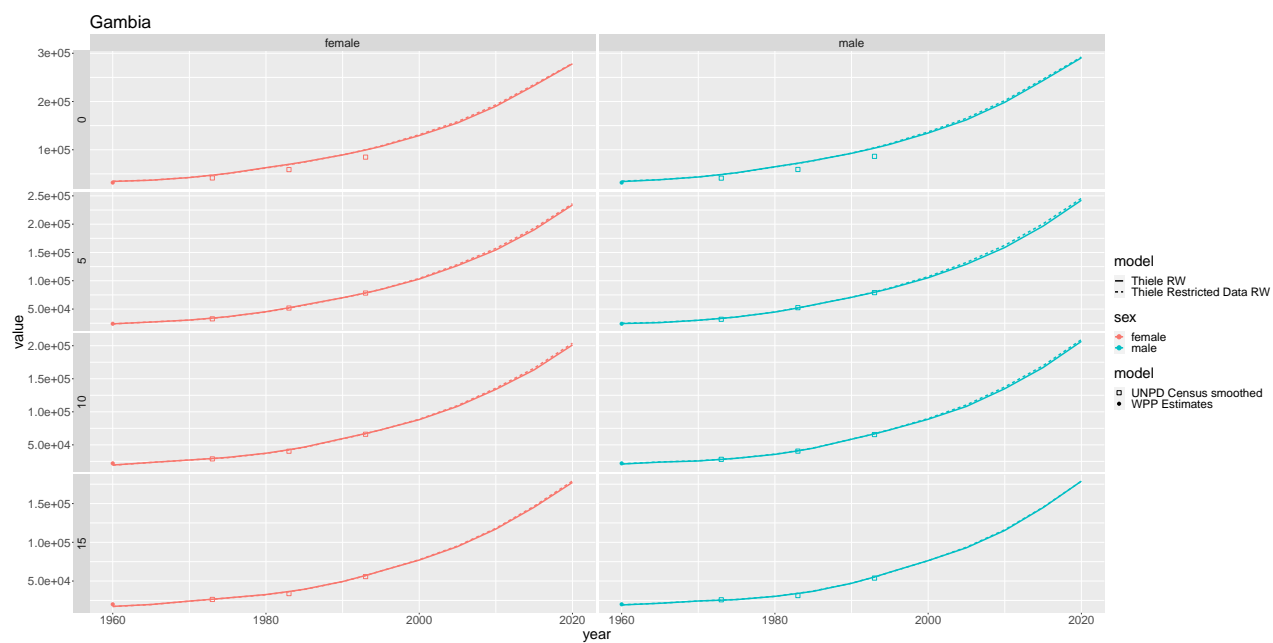


Figure 10: Population

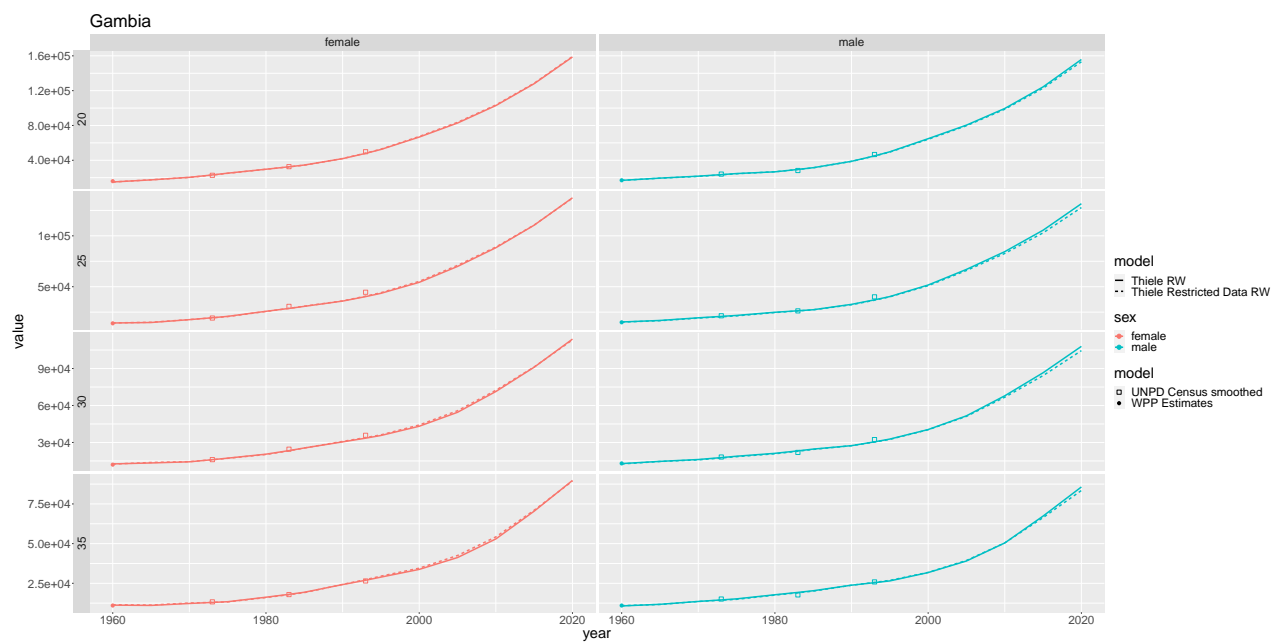


Figure 11: Population



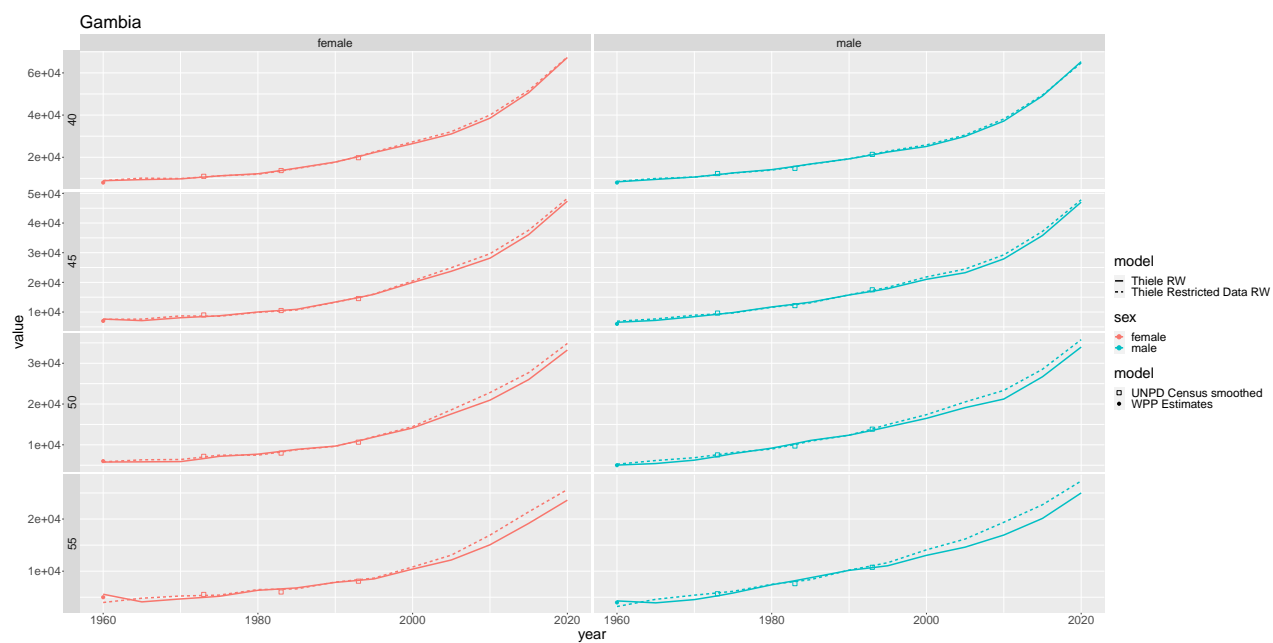


Figure 12: Population

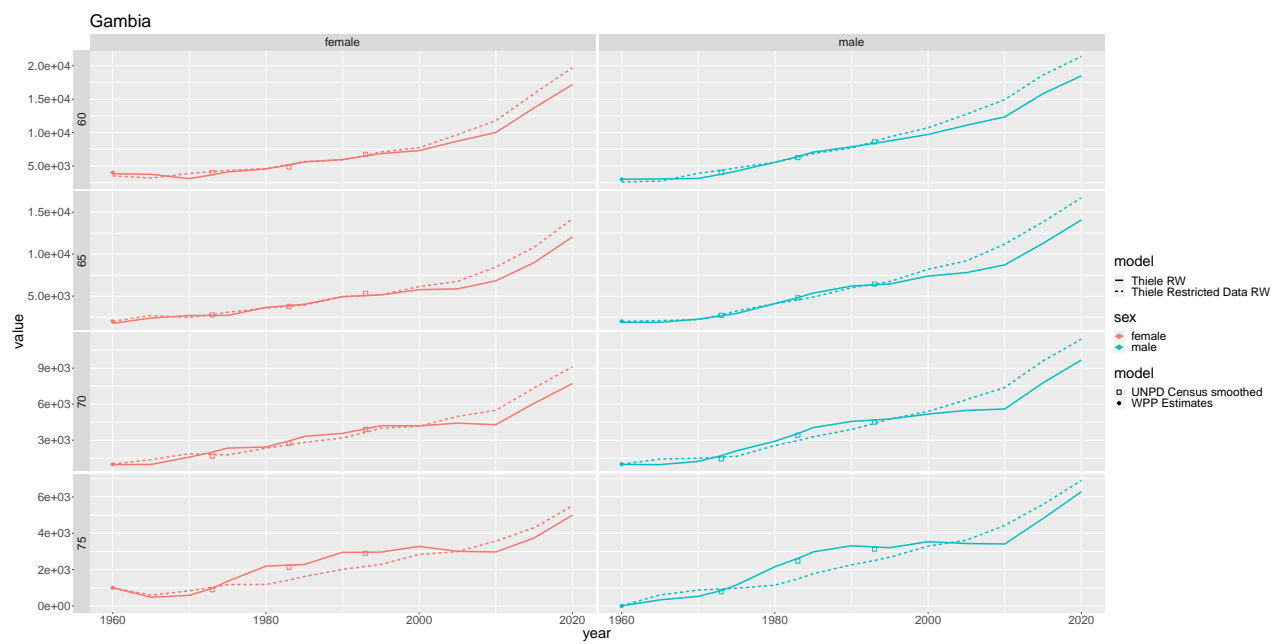


Figure 13: Population

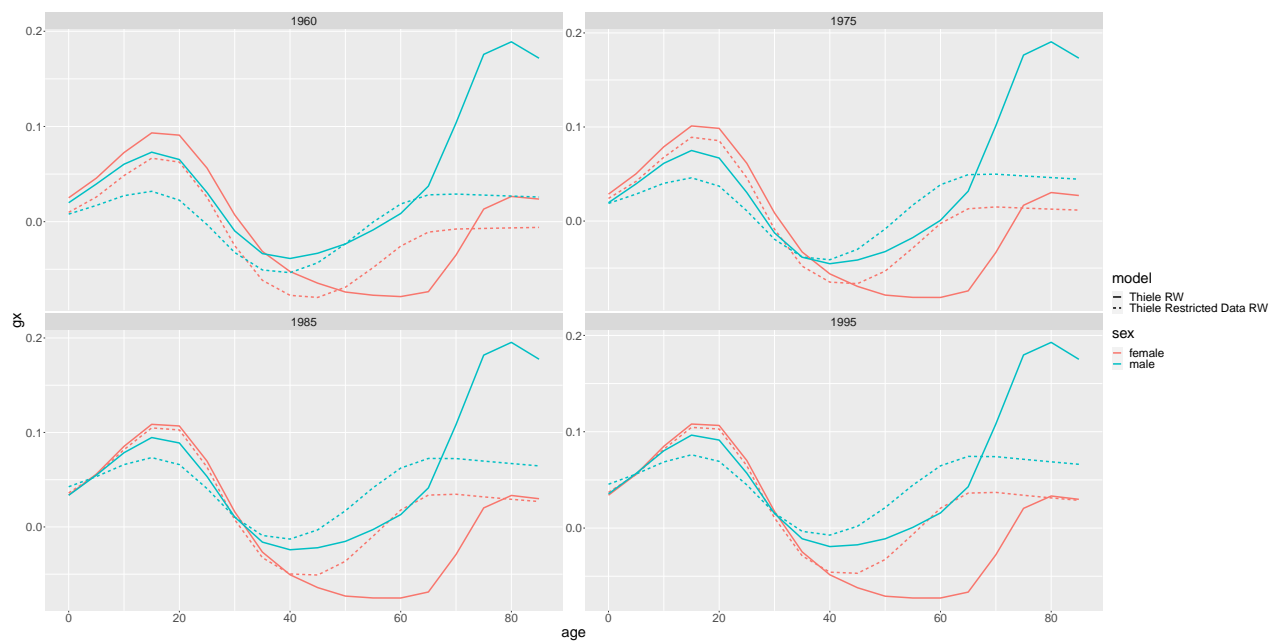


Figure 14: Migration

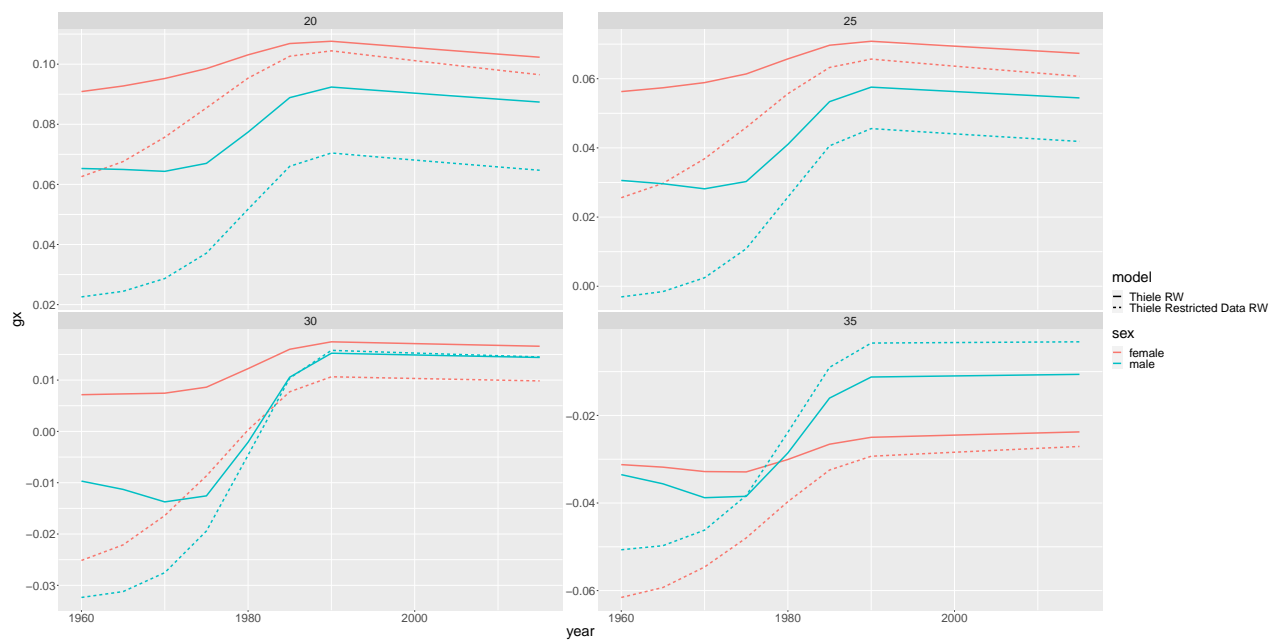


Figure 15: Migration

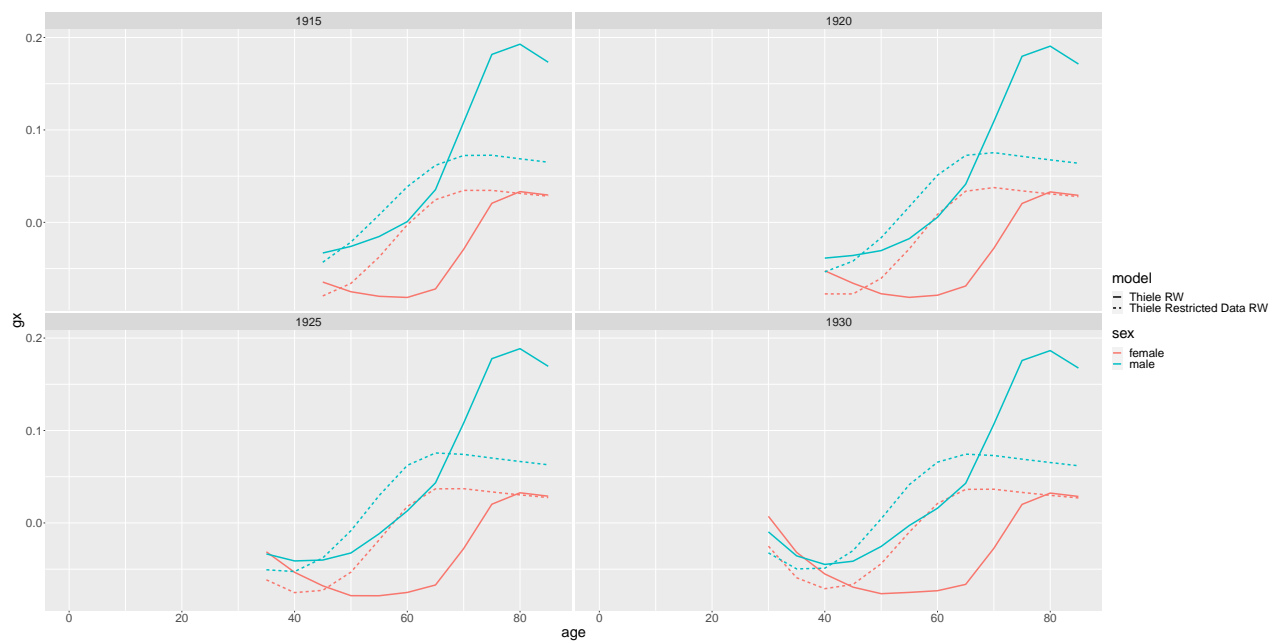


Figure 16: Migration

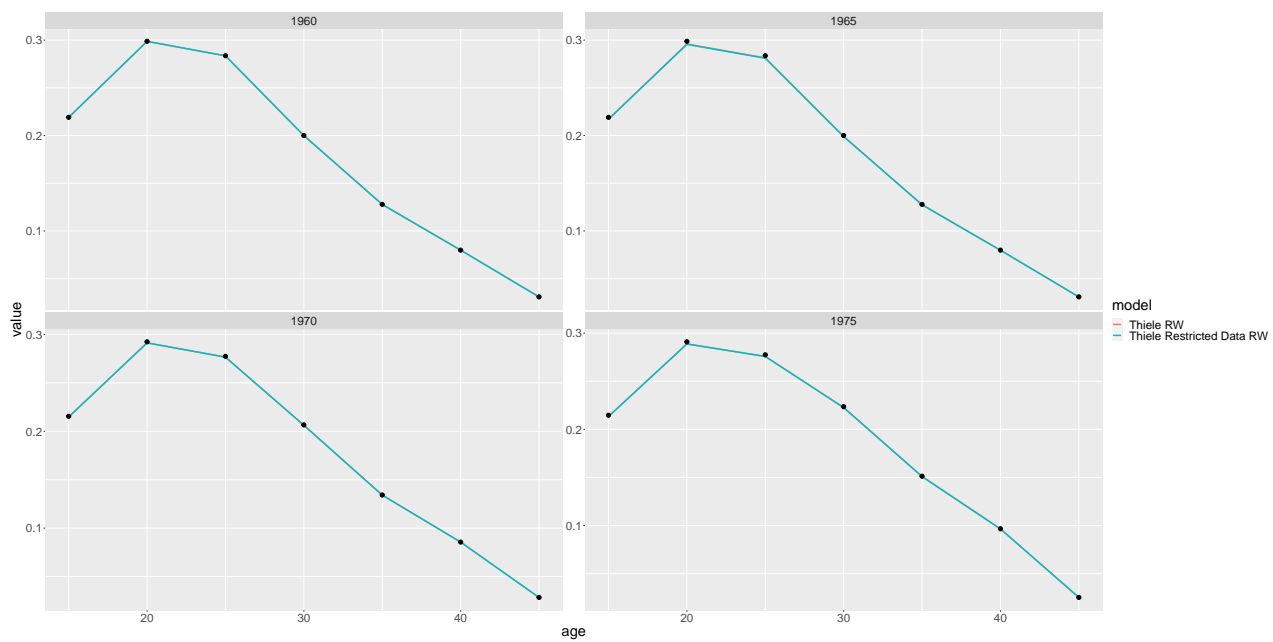


Figure 17: Fertility

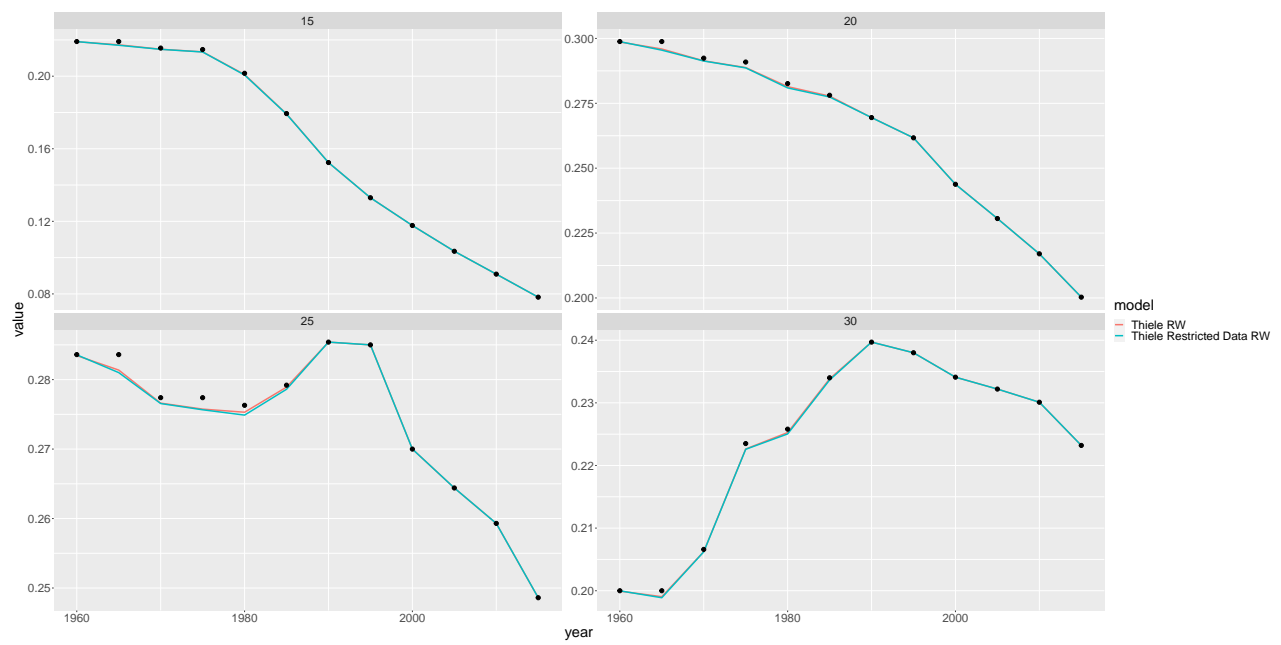


Figure 18: Fertility