Rwanda

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

## # A tibble: 18 x 5
##    aggr.age  `1978`   `1991`   `2002`   `2012`
##  *    <dbl>   <dbl>    <dbl>    <dbl>    <dbl>
##  1        0 466037. 653170   665141   771978
##  2        5 361325. 580142.  577688   765565
##  3       10 304639. 474522.  558736.  655970.
##  4       15 275639. 373865   494688.  588830.
##  5       20 231462. 308889.  420437   520983.
##  6       25 173641. 269890   337174.  453729
##  7       30 130320. 233112.  264493.  379522.
##  8       35 111521. 182968.  215660.  305718.
##  9       40 100240. 133279.  179419.  244142.
## 10       45  86457. 105644.  146335.  200541
## 11       50  74057.  92709.  113963.  167144.
## 12       55  62652.  79171.   86033.  136175.
## 13       60  49547.  64911.   65745.  104611
## 14       65  32385.  50270.   50987.   76197.
## 15       70  13319.  40610    38045.   54853.
## 16       75  22368.  35965    21734    39347.
## 17       80      NA      NA   14707    26706.
## 18       85      NA      NA    8231    26496.

## [1] "Census Males"

## # A tibble: 18 x 5
##    aggr.age  `1978`   `1991`   `2002`   `2012`
##  *    <dbl>   <dbl>    <dbl>    <dbl>    <dbl>
##  1        0 462588. 644055   655090   768049
##  2        5 358634. 566505   563351   757421
##  3       10 303160. 460628.  536404.  640364.
##  4       15 273928. 358739.  463566.  569188.
##  5       20 226121. 293768.  383778.  499650.
##  6       25 161692. 261421.  299168.  428454.
##  7       30 110684. 229449.  228871.  350632.
##  8       35  87492. 177671.  185847.  274429.
##  9       40  79283. 122634.  154300.  209778
## 10       45  71068.  86745.  123156.  167014.
## 11       50  61257.  71374.   91774.  136966.
## 12       55  51816.  62772.   65381.  108245.
## 13       60  42545.  52764.   47457.   79267
## 14       65  30119.  41664.   36184.   54291.
## 15       70  14043.  32755.   27764.   36581.
## 16       75  23333.  33020    16255    25146.
## 17       80      NA      NA   12081    17154.
## 18       85      NA      NA    6610    17077.
```

Thiele log-Normal Hump RW

```
##    user  system elapsed
##   30.20    0.56   30.80
```

```
## [1] "relative convergence (4)"
```
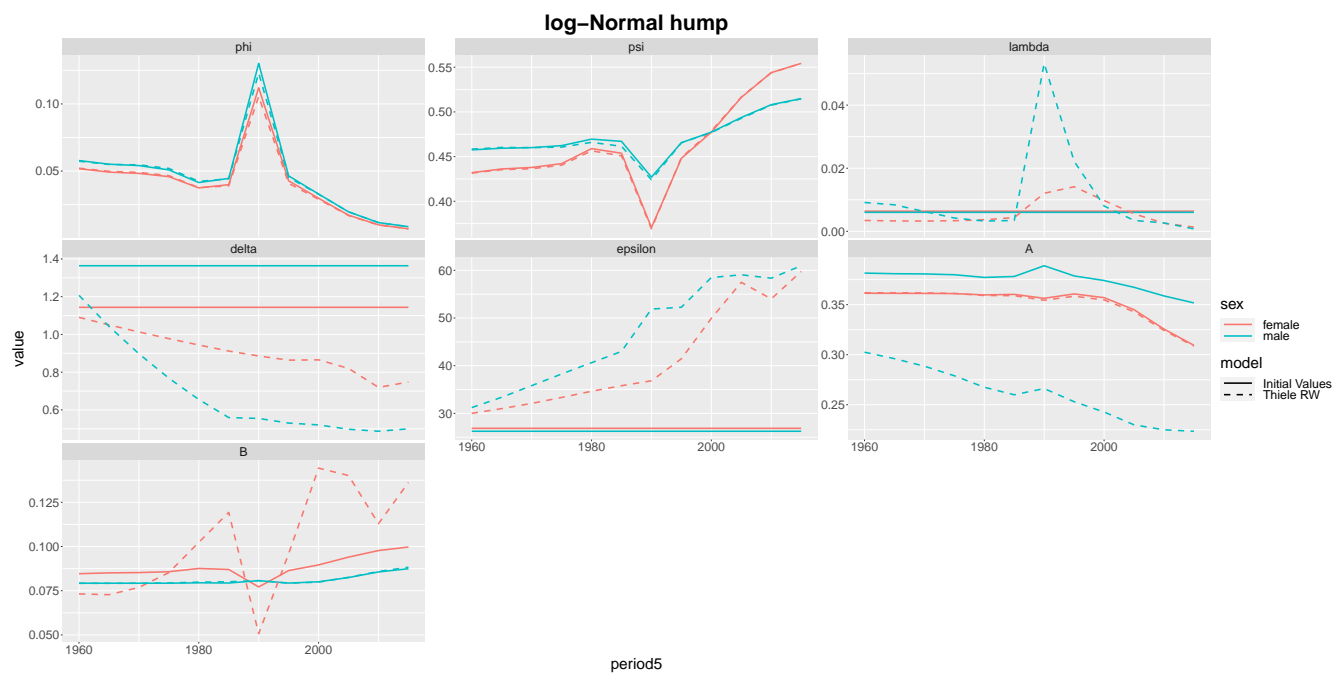
Figure 1: Estimated parameters
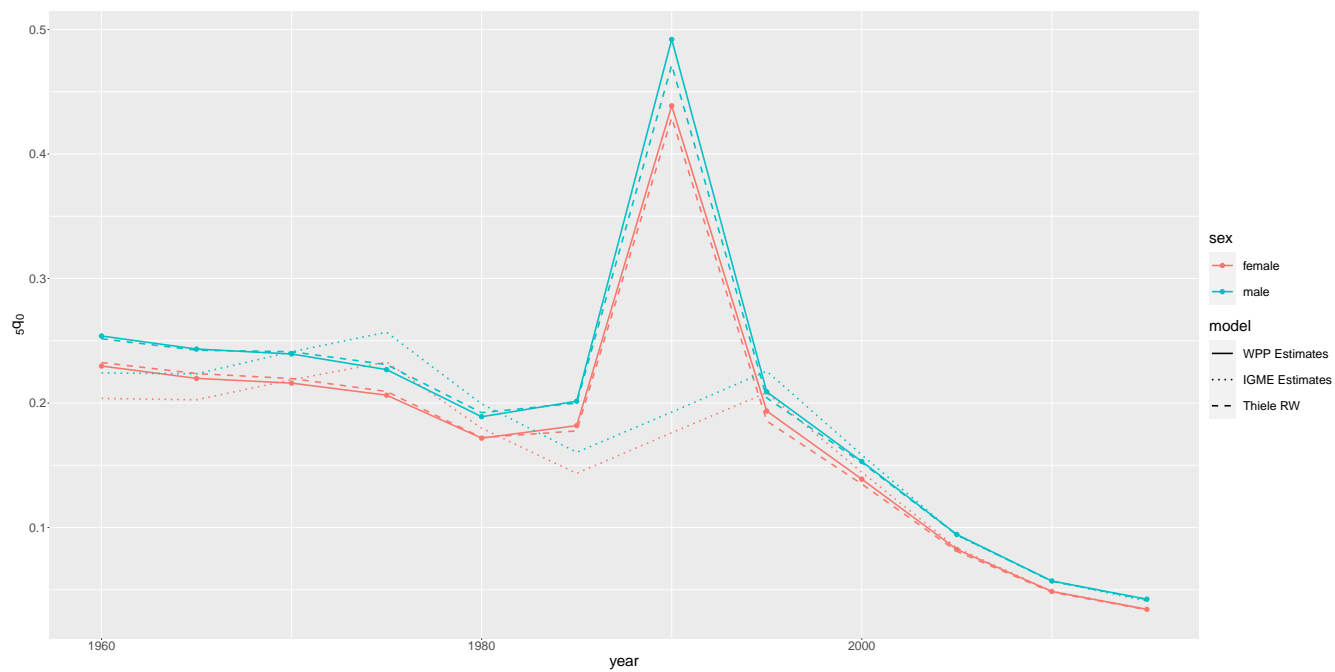
Figure 2: Estimated $_{45}q_{15}$
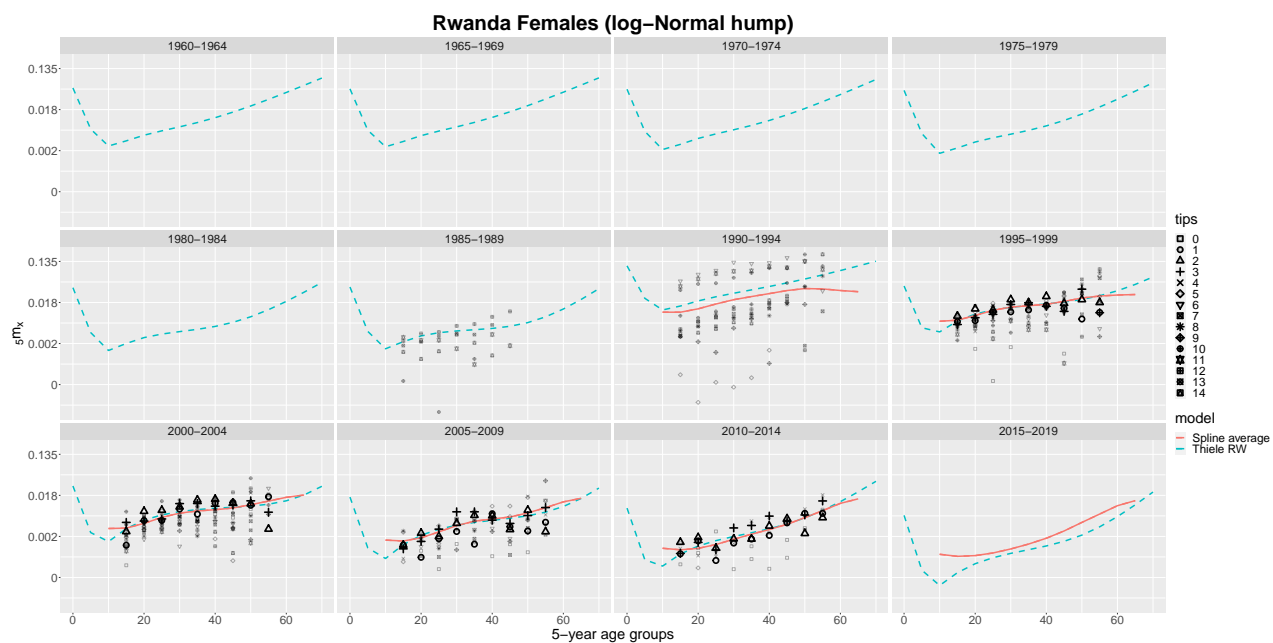

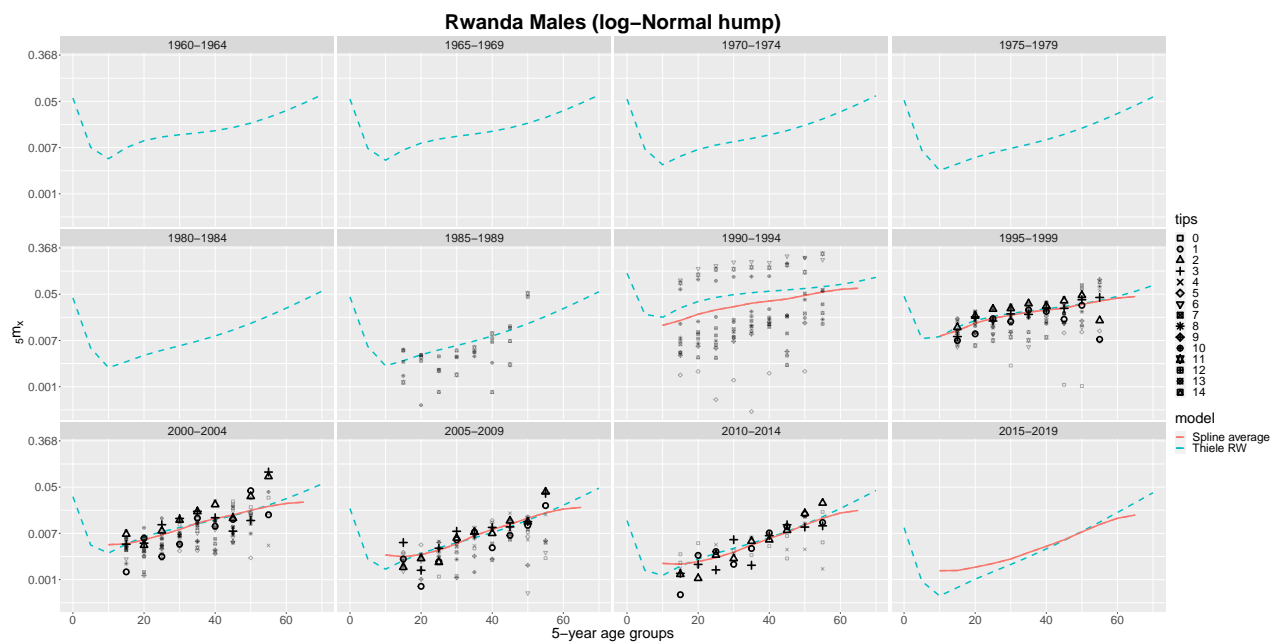Figure 3: Estimated $_{5}q_{0}$

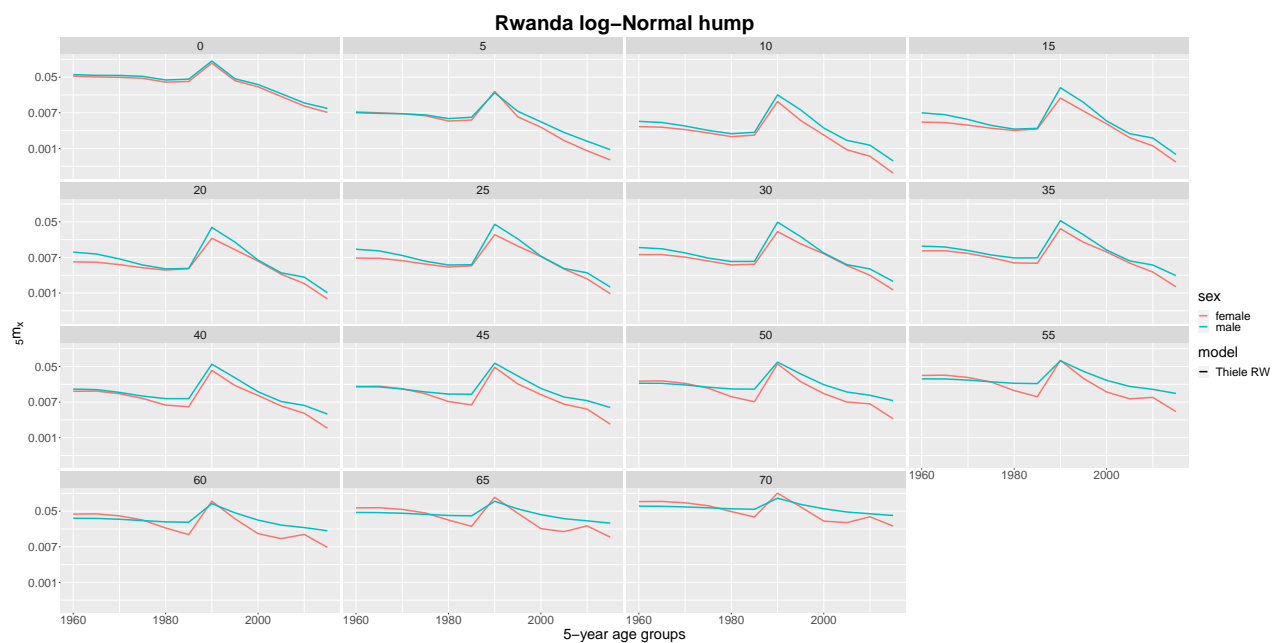Figure 4: Mortality Schedules

Figure 5: Mortality Schedules

5

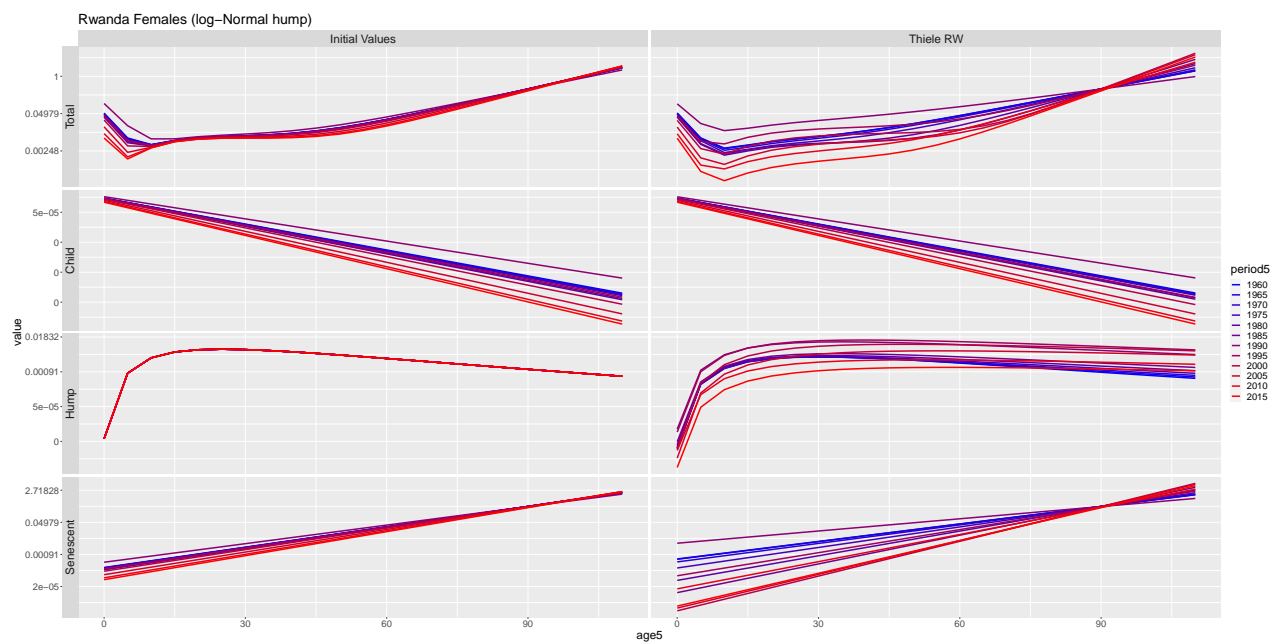Figure 6: Mortality Schedules
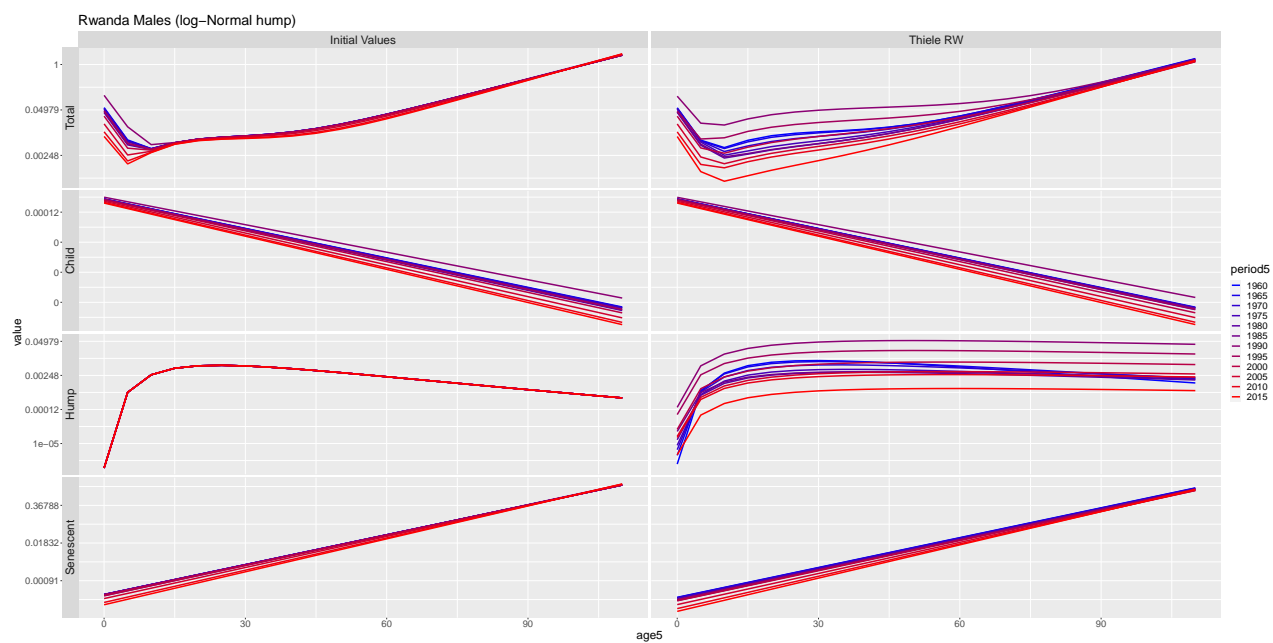

Figure 7: Thiele Decomposed
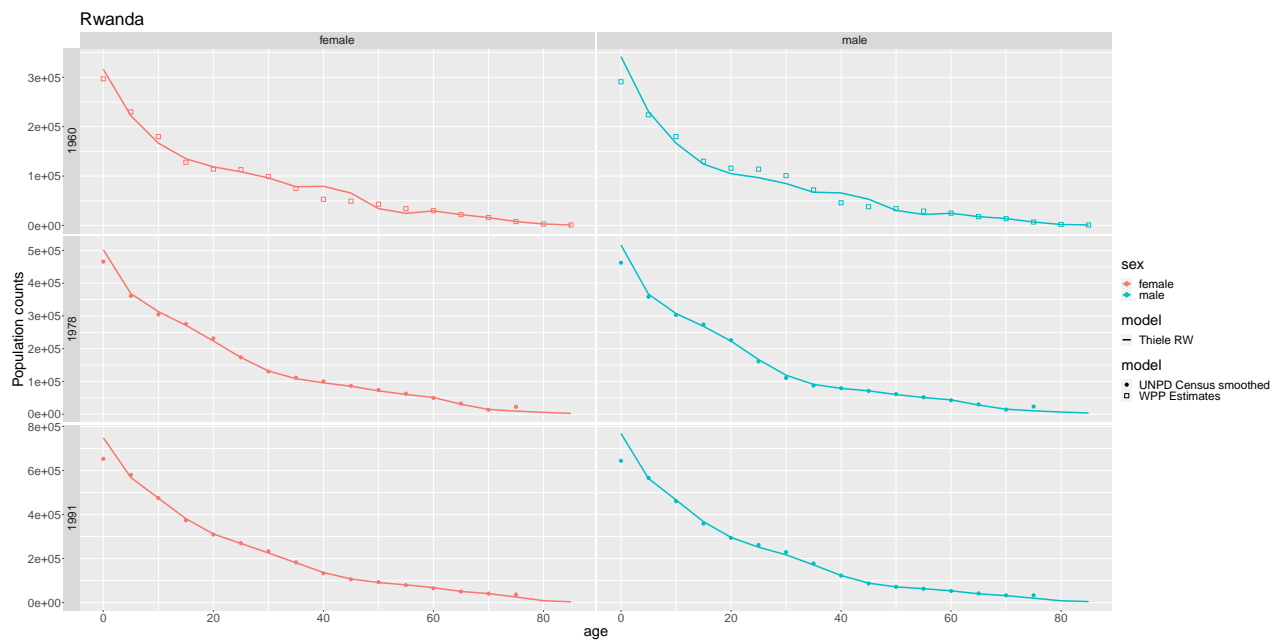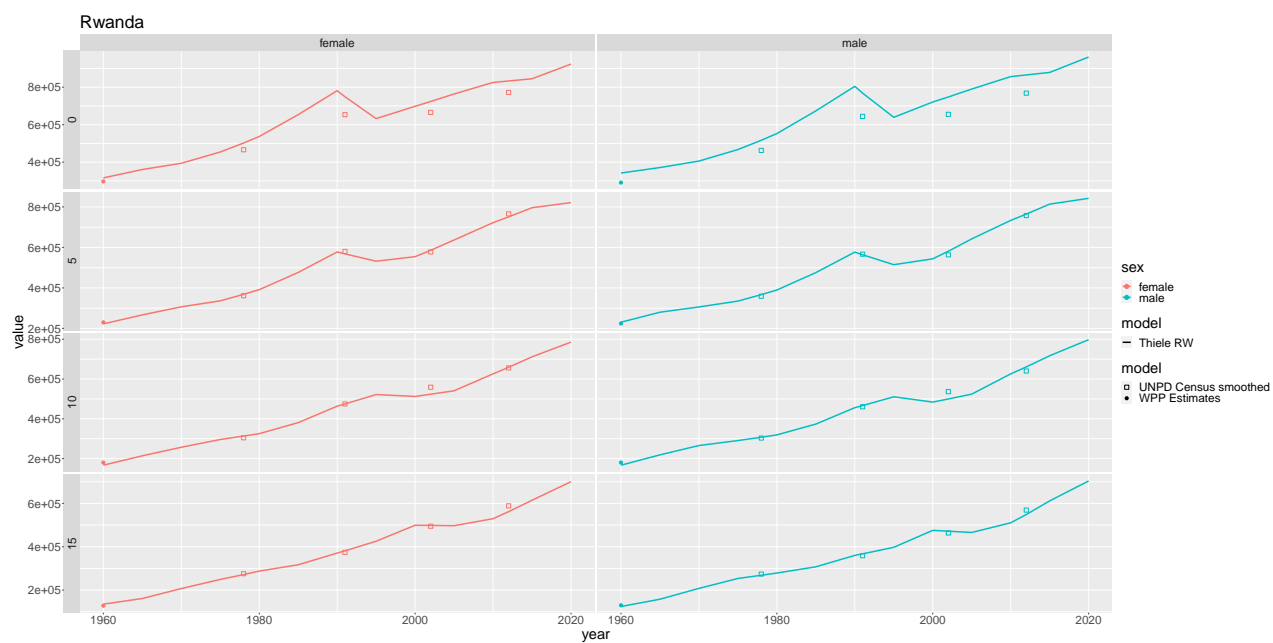
Figure 8: Thiele Decomposed
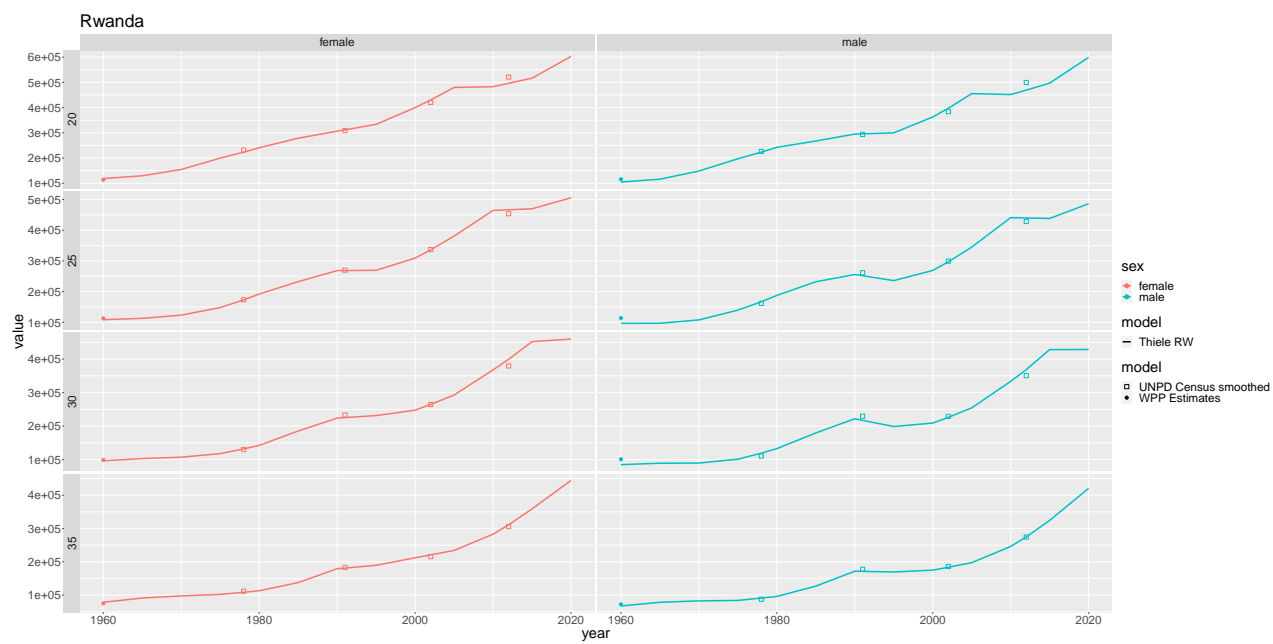

Figure 9: Population
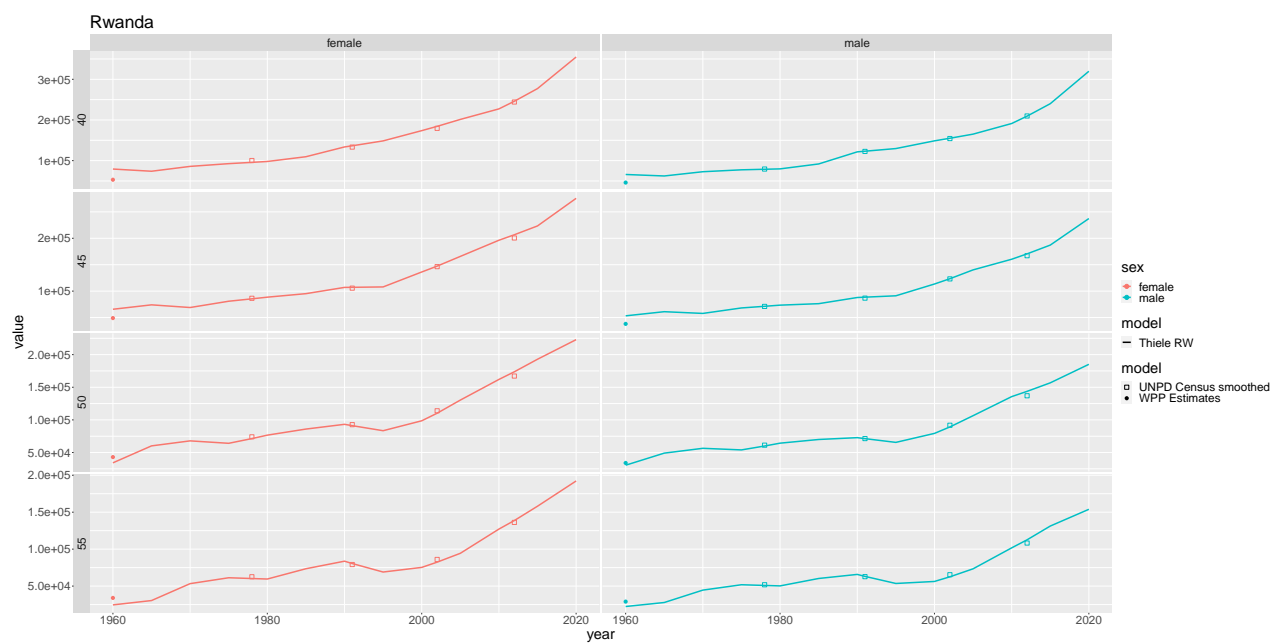
Figure 10: Population
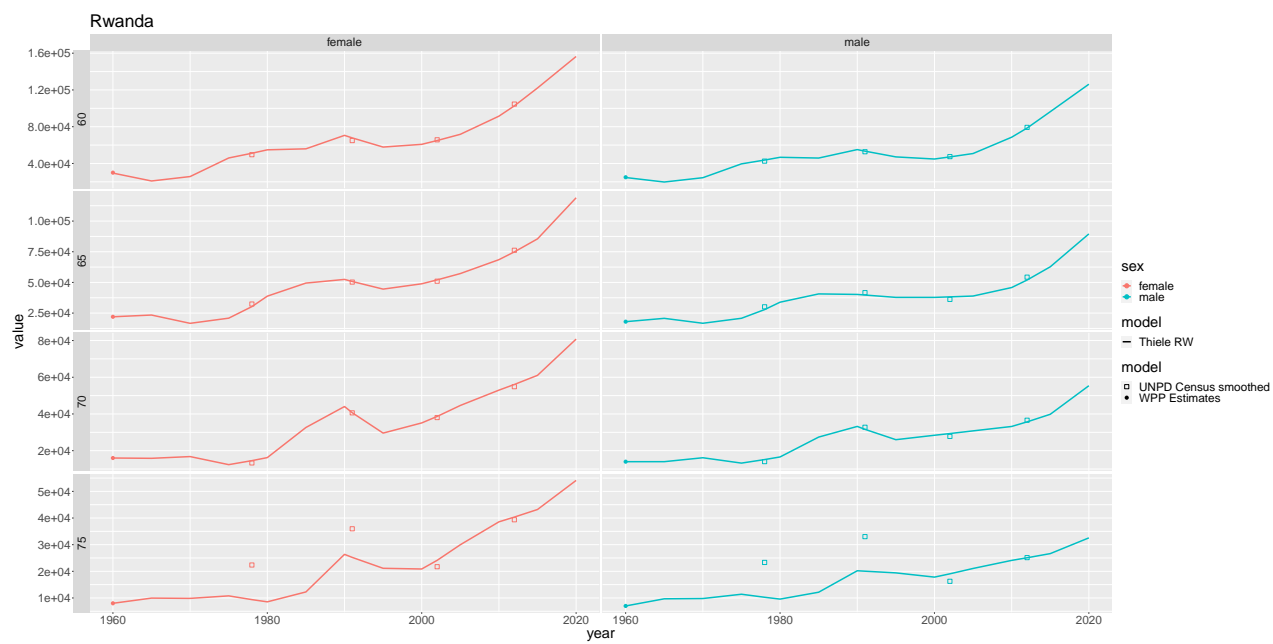

Figure 11: Population

Figure 12: Population
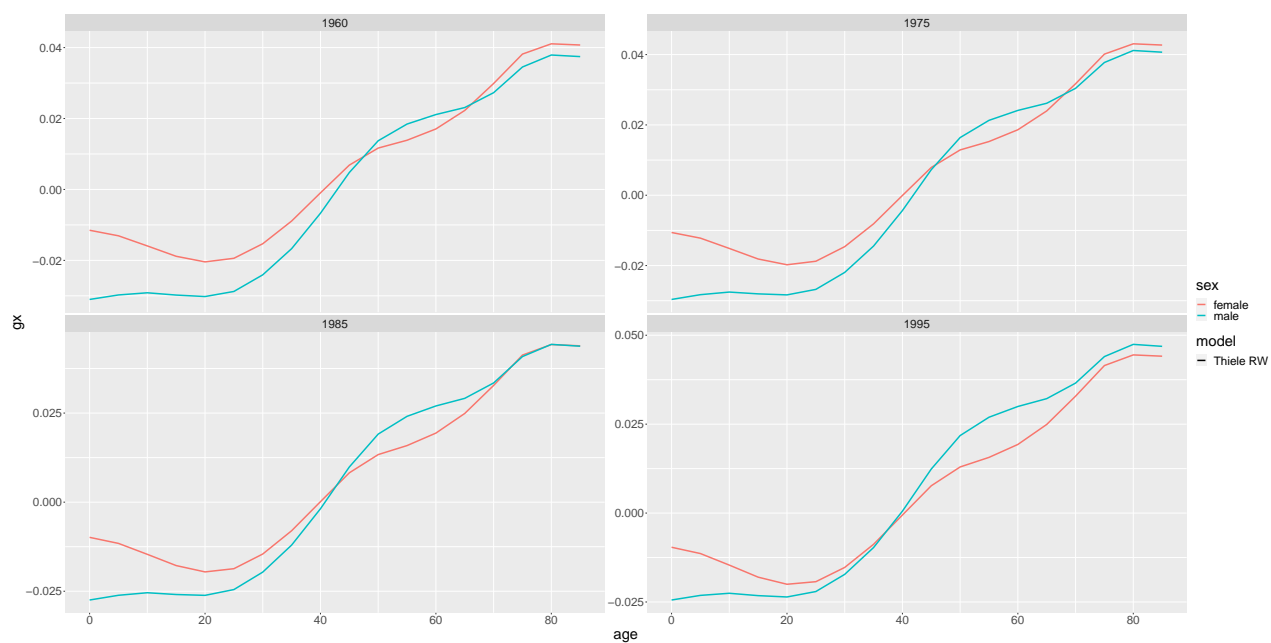

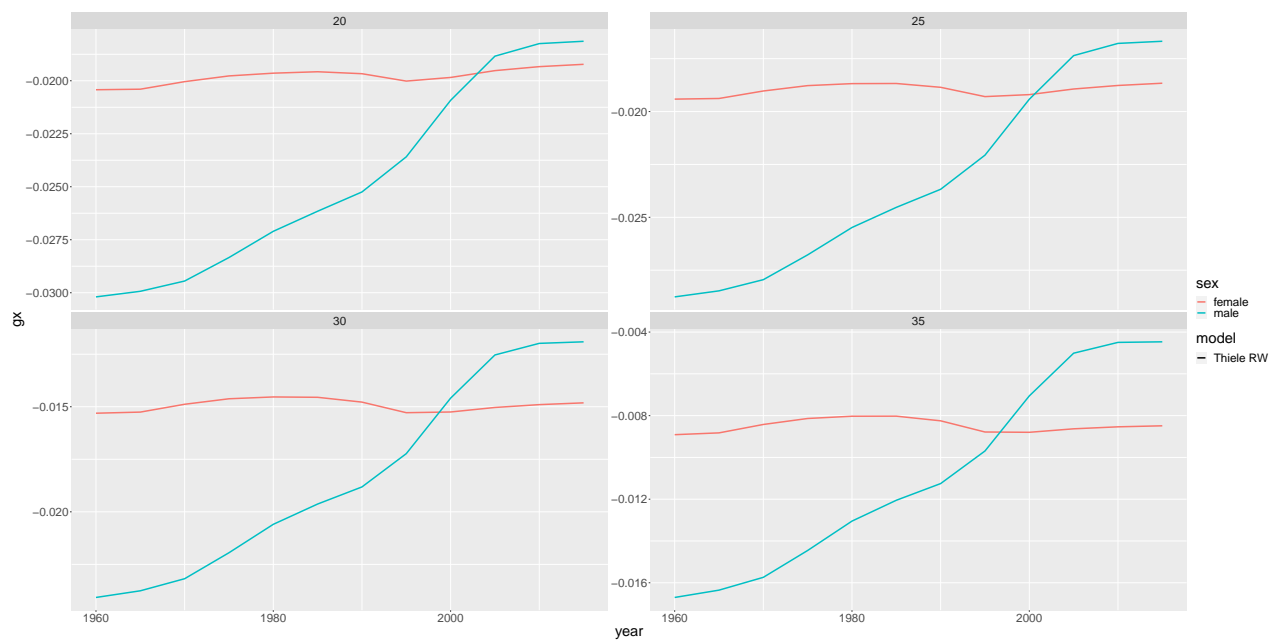Figure 13: Population
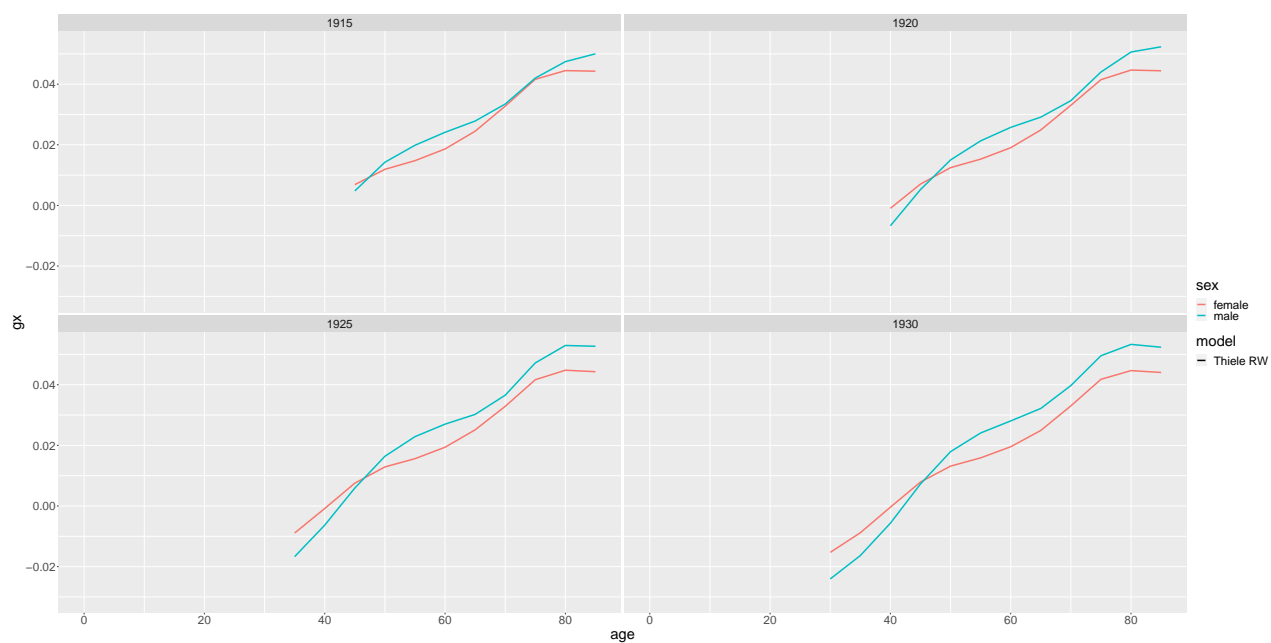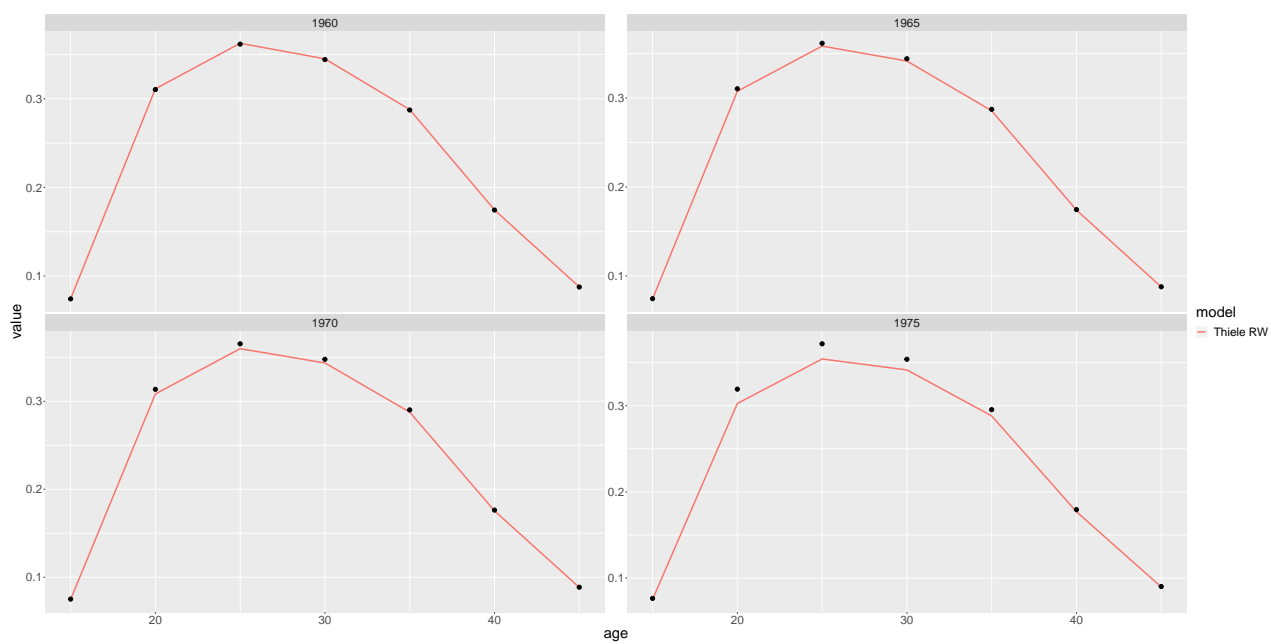
9

Figure 14: Migration

Figure 15: Migration
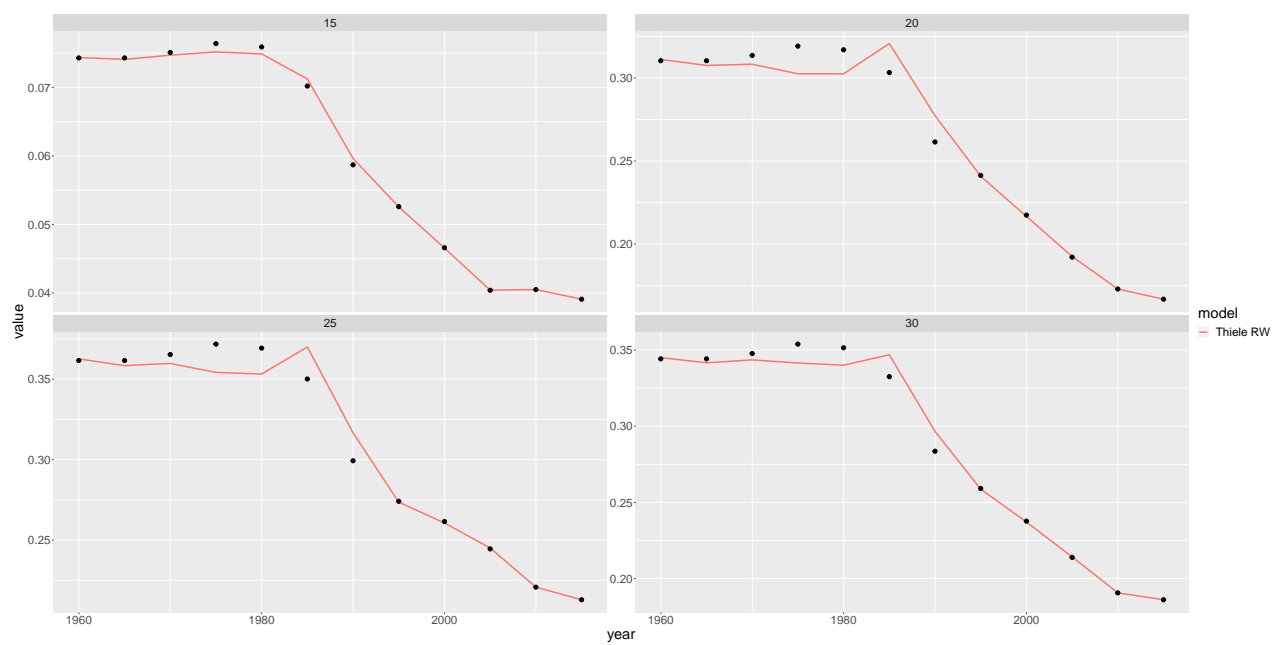
Figure 16: Migration

Figure 17: Fertility

Figure 18: Fertility