## Mozambique

```
## [1] "Census Females"
   # A tibble: 18 x 5
##
                           `1980`
                                               2007
      aggr.age
                 1970
                                     1997
##
         <dbl>
                  <dbl>
                            <dbl>
                                      <dbl>
                                                <dbl>
##
   1
              0 723077
                         1064130. 1388350
                                            1963660.
##
              5 615358
                          912491. 1123532. 1594522.
##
    3
             10 436100.
                          716104.
                                    931153. 1243611.
##
             15 318958.
                          571487.
                                    853550. 1038278.
##
   5
             20 320232.
                          500286.
                                    790943.
                                              951448.
##
    6
             25 335818
                          441540.
                                    653526.
                                              834306.
##
   7
             30 319309
                          382720.
                                    509496
                                              683334.
##
    8
             35 277668
                          327087.
                                    409375.
                                              542334.
##
    9
             40 223728
                          273286.
                                    329197.
                                              415756.
             45 172490
##
  10
                          221183.
                                    269851.
                                              332424.
##
   11
             50 129875
                          171975.
                                    220113
                                              275973.
##
   12
             55 102099.
                          132512.
                                    171406
                                              215040.
##
   13
             60
                 80779
                          105655.
                                    133428.
                                              163891.
##
  14
             65
                 50631
                           77596.
                                     98570.
                                              124119.
                                     63340
##
  15
             70
                 19726
                           51011.
                                               87866.
## 16
             75
                 12937
                           33819.
                                     38412.
                                               57908.
## 17
             80
                    NA
                           24471.
                                     22126.
                                               34254.
             85
                           23509.
                                     17850
                                               30523.
## 18
                    NA
## [1] "Census Males"
   # A tibble: 18 x 5
##
                 1970
                           `1980`
                                     1997
                                               2007
      aggr.age
##
          <dbl>
                  <dbl>
                            <dbl>
                                      <dbl>
                                                <dbl>
##
   1
              0 697822
                         1018835. 1353206
                                             1917794.
##
    2
              5 652180.
                          914042. 1131271
                                             1578767.
    3
             10 503181.
##
                          768139.
                                    945280
                                             1239592.
    4
             15 360521.
                          581307.
##
                                    783251.
                                              962135.
##
    5
             20 305990.
                          425760.
                                    639416.
                                              795540.
             25 282238.
##
    6
                          349815.
                                    516370.
                                              693327.
##
    7
             30 262403.
                          308554.
                                    425804.
                                              589094.
            35 239745.
##
    8
                          270596.
                                    356955
                                              478250.
##
   9
             40 203729.
                          243736.
                                    292744.
                                              383917.
## 10
             45 160248.
                          214258.
                                    240772
                                              310056.
                          172993.
##
  11
             50 116962.
                                    194249
                                              244428.
##
  12
                 89211.
                          131372.
                                    154370.
             55
                                              189850.
##
  13
             60
                 74190.
                           99948.
                                    122804.
                                              147036.
##
  14
             65
                 50689.
                           71866.
                                     90648
                                              110029.
##
  15
             70
                 18859
                           47637.
                                     59192
                                               78466.
## 16
             75
                 10545
                           31136.
                                     36442.
                                               51400.
## 17
             80
                    NA
                           20838.
                                     20295
                                               29215.
## 18
             85
                    NA
                           21862.
                                     16724
                                               27477.
```

## system elapsed user ## 28.99 0.44 29.56 ## [1] "relative convergence (4)"

Thiele log-Normal Hump RW (Pop 5-9 to 70-74, DHS 15-19 to 45-49)

```
## user system elapsed
## 25.75 0.24 26.04
```

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

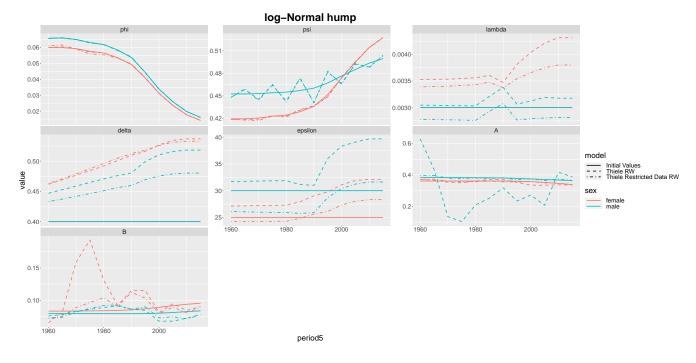


Figure 1: Estimated parameters

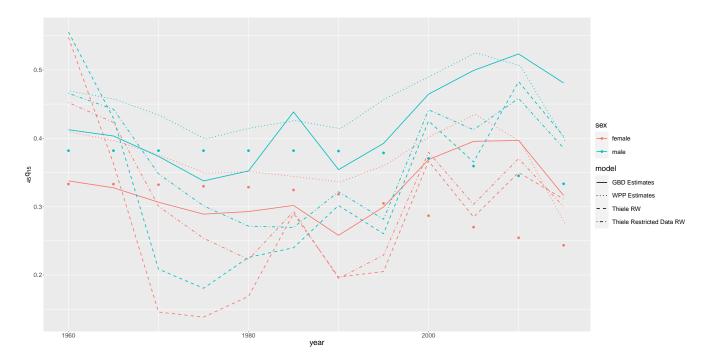


Figure 2: Estimated  $_{45}q_{15}$ 

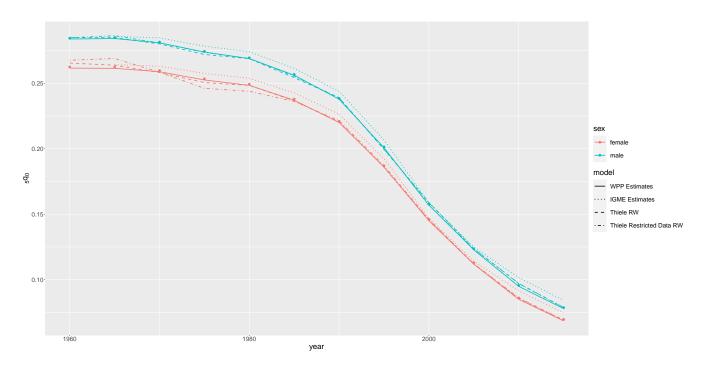


Figure 3: Estimated  $_5q_0$ 

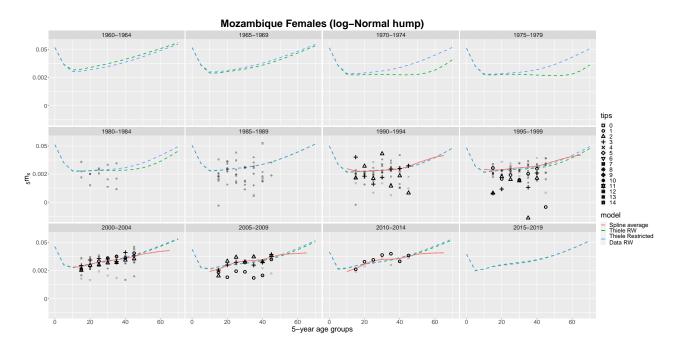


Figure 4: Mortality Schedules

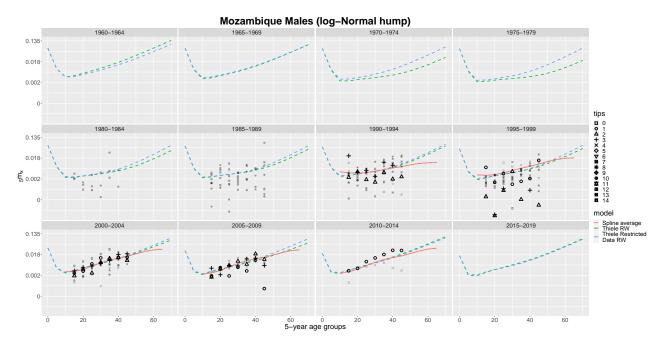


Figure 5: Mortality Schedules

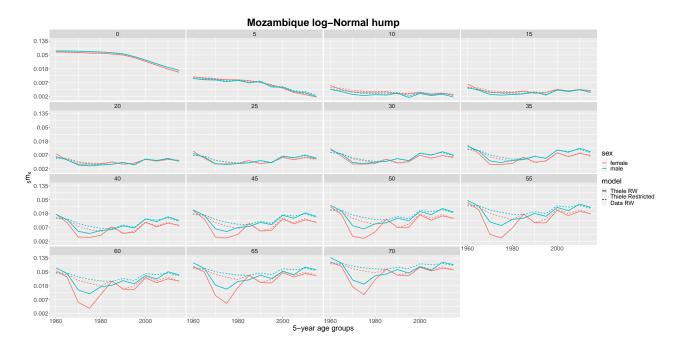


Figure 6: Mortality Schedules

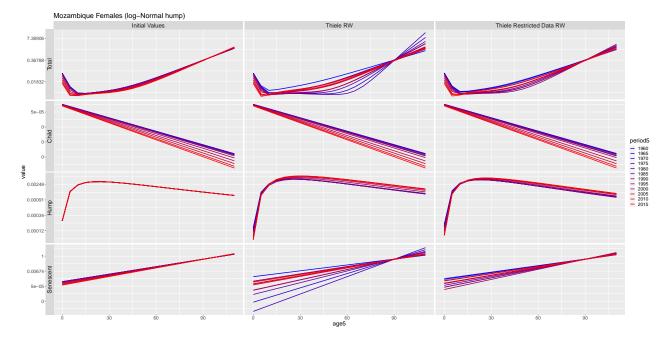


Figure 7: Thiele Decomposed

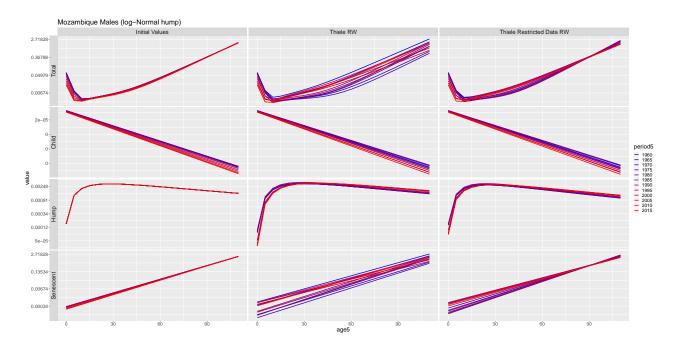


Figure 8: Thiele Decomposed

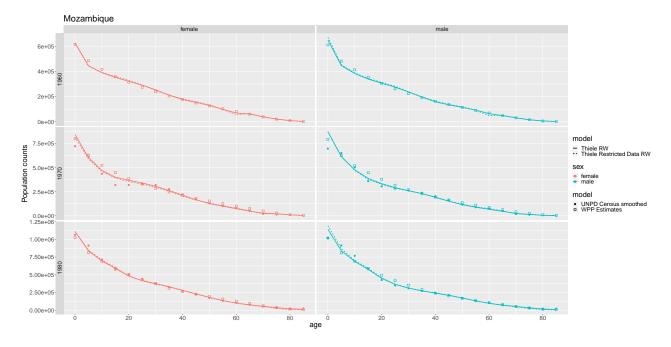


Figure 9: Population

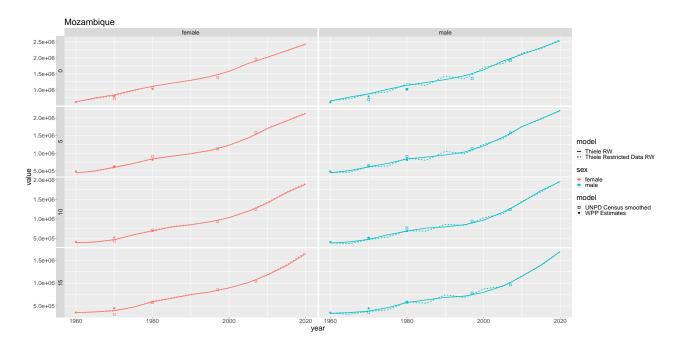


Figure 10: Population

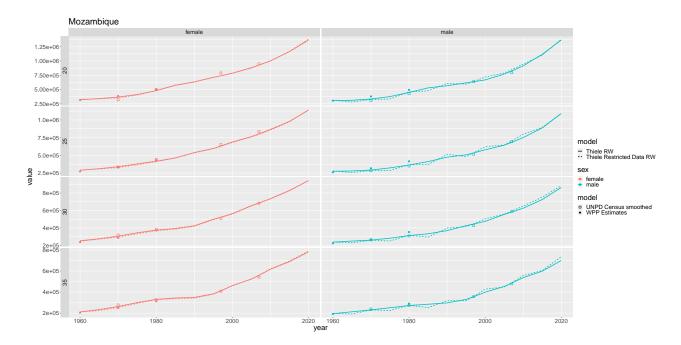


Figure 11: Population

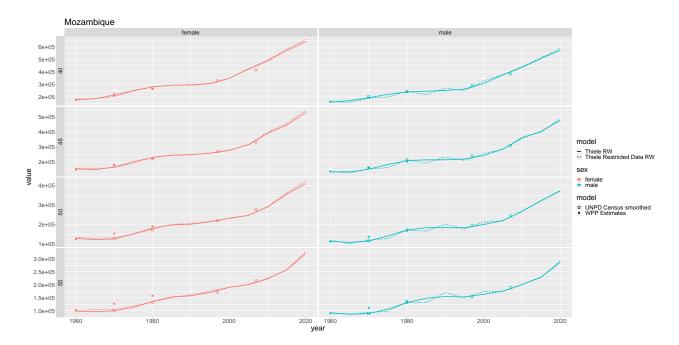


Figure 12: Population

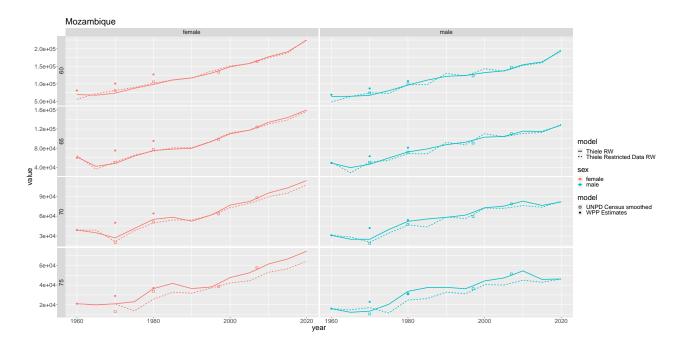


Figure 13: Population

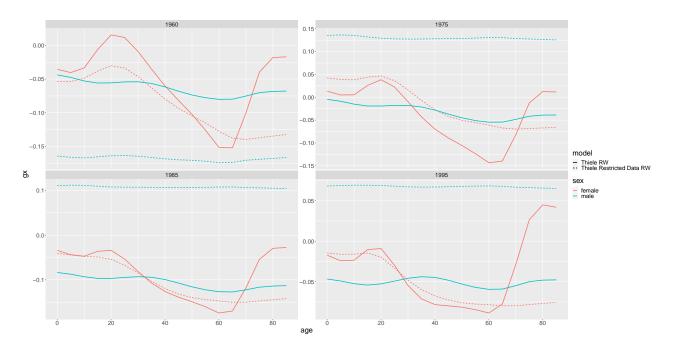


Figure 14: Migration

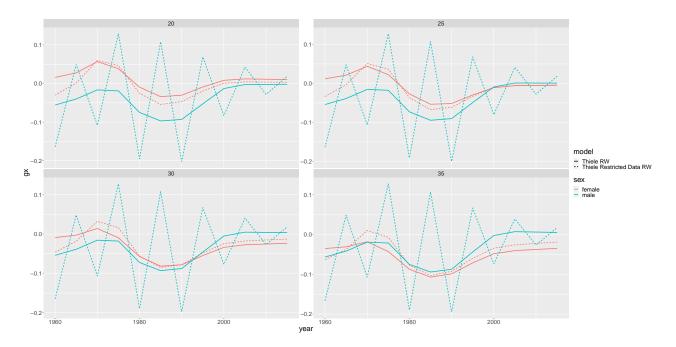


Figure 15: Migration

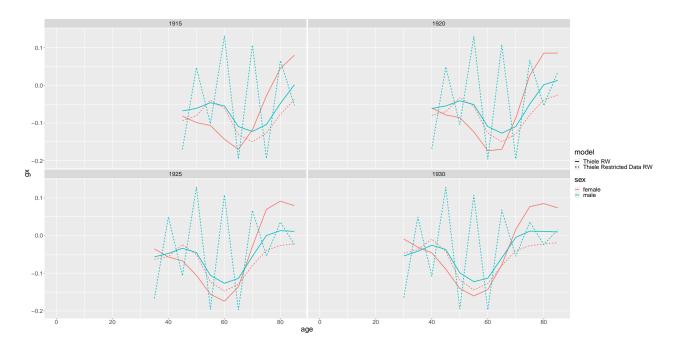


Figure 16: Migration

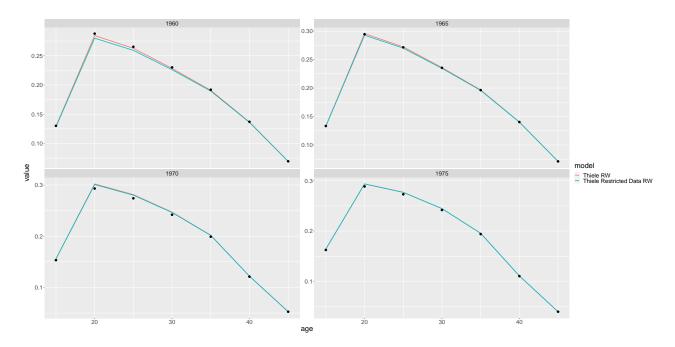


Figure 17: Fertility

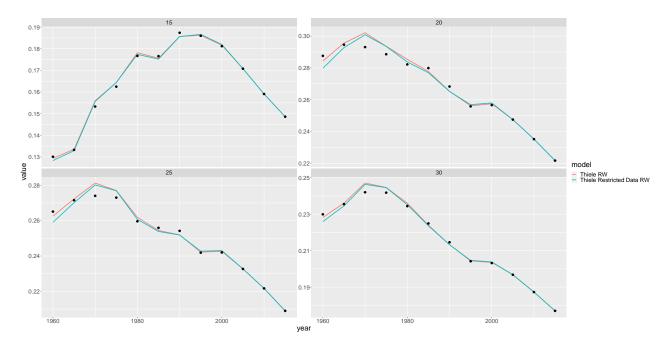


Figure 18: Fertility