Angola

```
## [1] "Census Females"
## # A tibble: 18 x 2
##
                  `2014`
      aggr.age
##
         <dbl>
                   <dbl>
##
   1
             0 2513566
             5 2060533.
##
   3
            10 1613252.
##
            15 1315817.
##
   5
            20 1156666.
##
   6
            25 1001433.
##
   7
            30
                834609.
##
   8
            35
                696531.
##
   9
            40 563746.
## 10
            45 452544
## 11
            50 363423.
## 12
            55 268526.
## 13
            60
                188471.
## 14
            65 132814.
            70
## 15
                  94112
## 16
            75
                  61827.
## 17
            80
                  36358.
## 18
            85
                  38754.
## [1] "Census Males"
   # A tibble: 18 x 2
##
      aggr.age
                  2014
##
         <dbl>
                   <dbl>
##
   1
             0 2484582.
##
   2
             5 2028635.
   3
            10 1573487.
##
##
    4
            15 1242570.
##
   5
            20 1044456.
##
   6
            25
                890598.
##
   7
            30
                749153.
##
   8
            35
                633350.
##
   9
            40 523262.
## 10
            45 419722.
## 11
            50 328218.
## 12
            55 239464.
## 13
            60 164282.
## 14
            65
               108960.
## 15
            70
                 73054.
## 16
            75
                  46385.
## 17
            80
                  26482.
## 18
            85
                  27215.
```

Thiele log-Normal Hump RW

Warning in fit_tmb(input.thiele.loghump.oag.vec.RW, inner_verbose = FALSE, : convergence error: false c

```
## user system elapsed
## 437.09 1.05 439.19
## [1] "false convergence (8)"
```

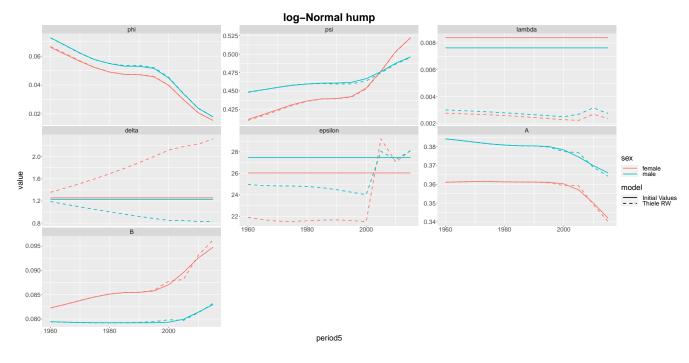


Figure 1: Estimated parameters

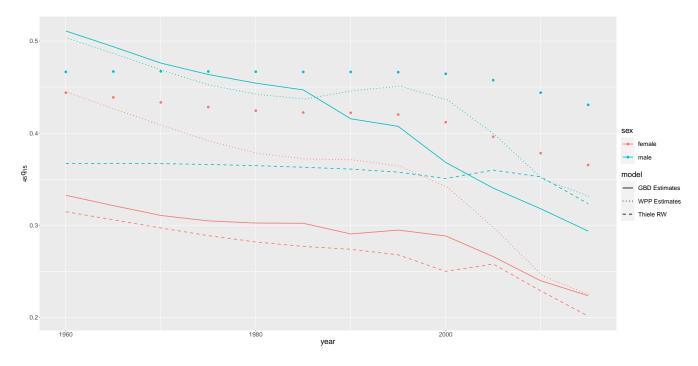


Figure 2: Estimated $_{45}q_{15}$

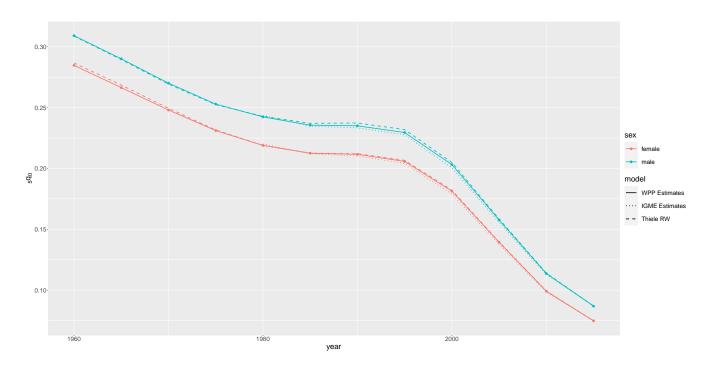


Figure 3: Estimated $_5q_0$

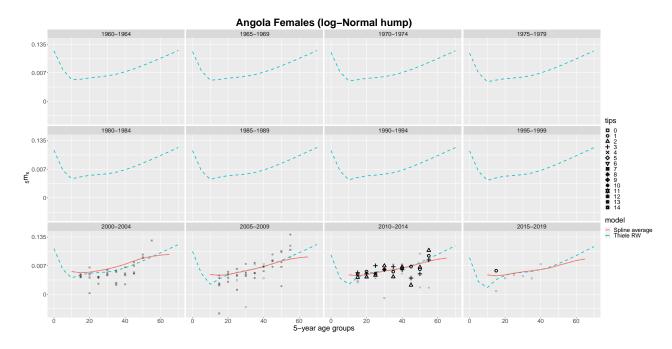


Figure 4: Mortality Schedules

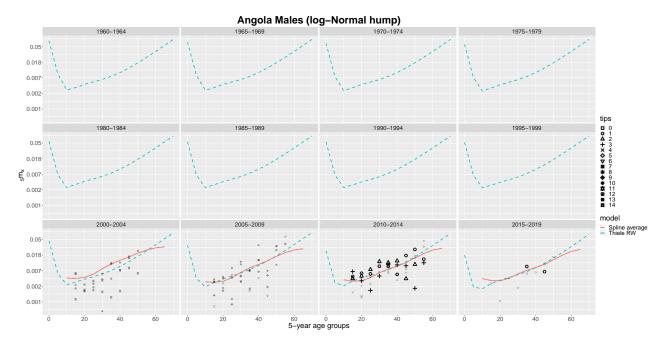


Figure 5: Mortality Schedules

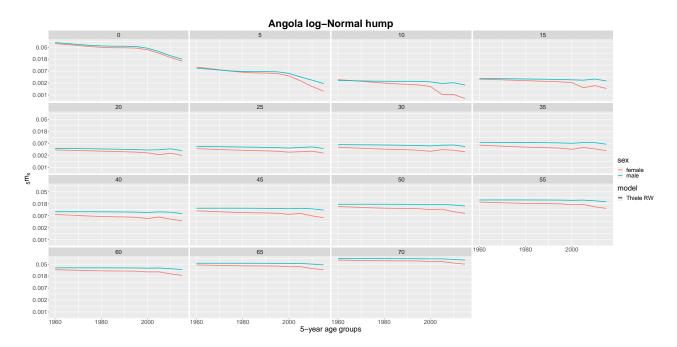


Figure 6: Mortality Schedules

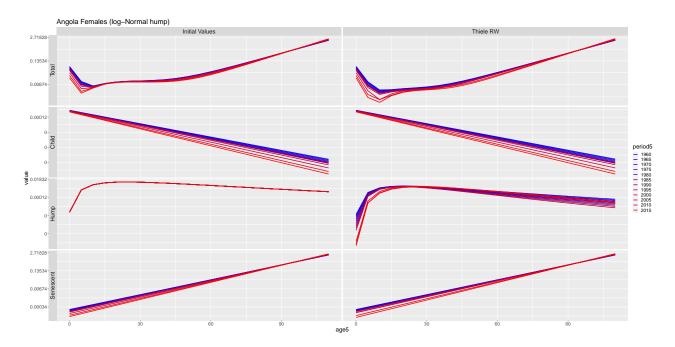


Figure 7: Thiele Decomposed

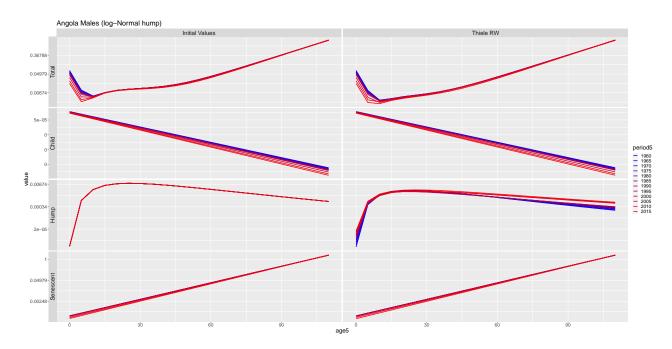


Figure 8: Thiele Decomposed

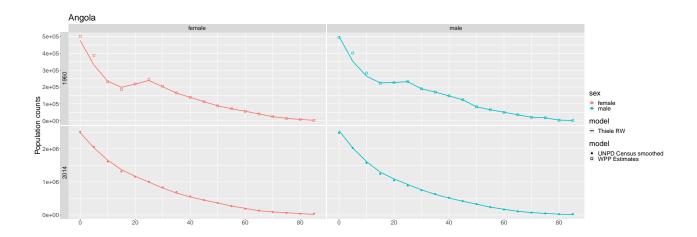


Figure 9: Population

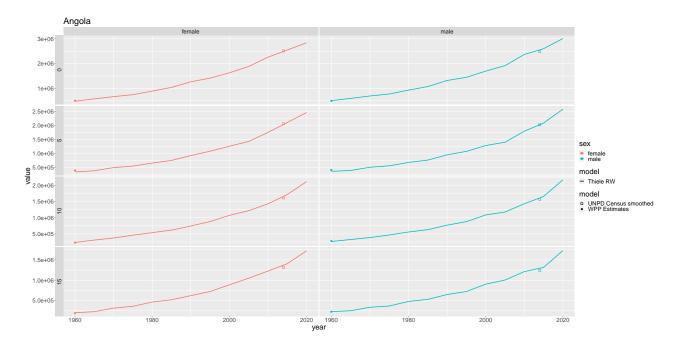


Figure 10: Population

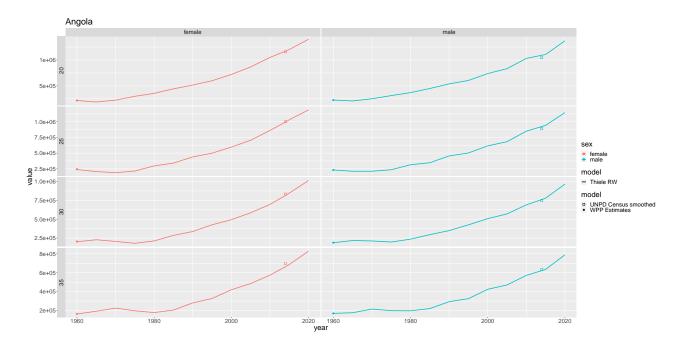


Figure 11: Population

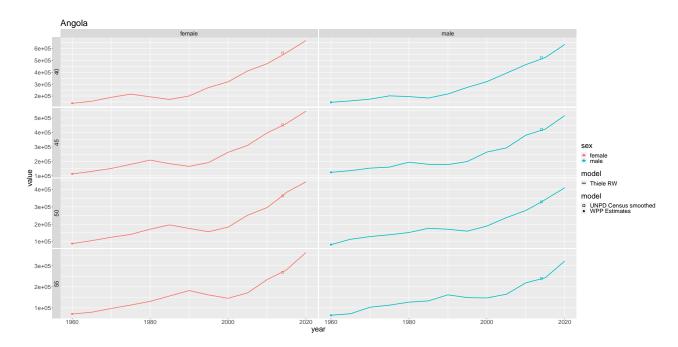


Figure 12: Population

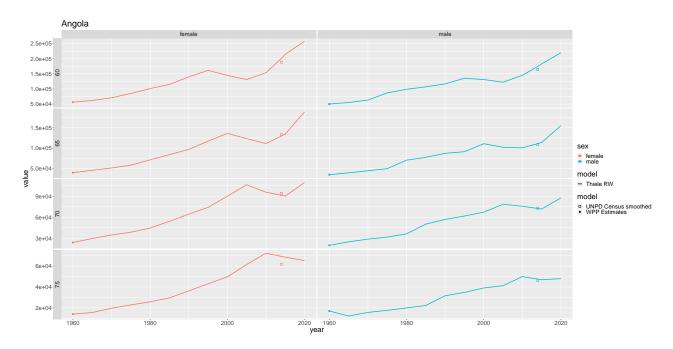


Figure 13: Population

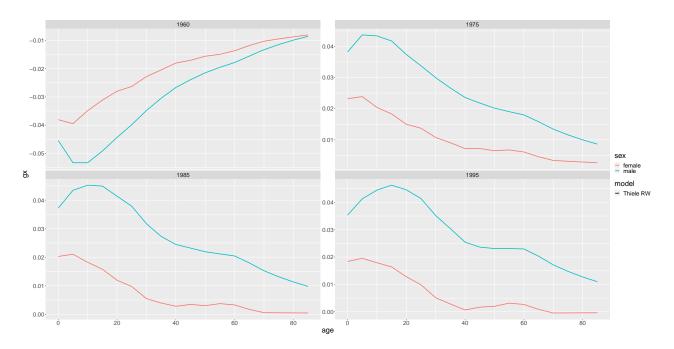


Figure 14: Migration

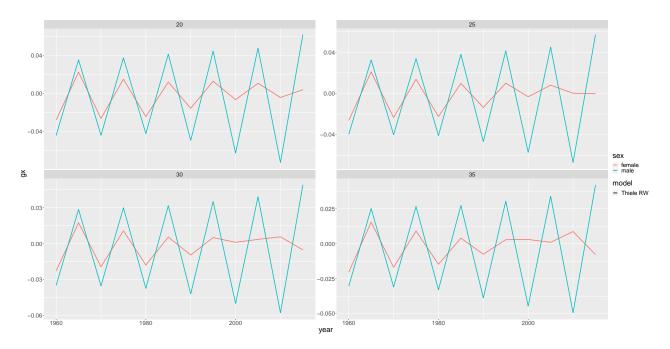


Figure 15: Migration

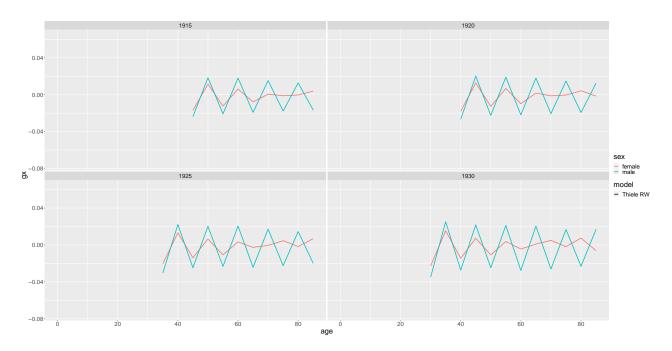


Figure 16: Migration

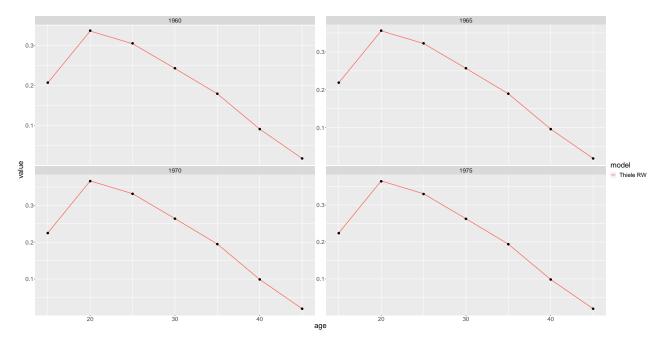


Figure 17: Fertility

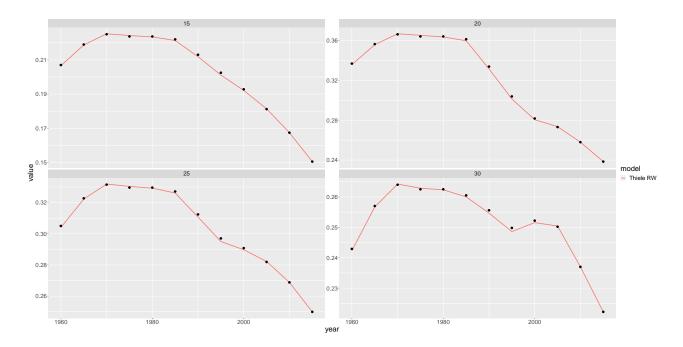


Figure 18: Fertility