# Namibia

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

```
## # A tibble: 18 x 4
##    aggr.age  `1991`  `2001`  `2011`
##  *    <dbl>   <dbl>   <dbl>   <dbl>
##  1        0 109797. 122923. 142821
##  2        5  98111. 123939. 126935.
##  3       10  89789. 117304. 122470.
##  4       15  81191. 104297. 119051.
##  5       20  69151.  90193. 107680.
##  6       25  57152.  76700.  91594
##  7       30  45905.  63553.  76564.
##  8       35  35675.  51719.  63741
##  9       40  28235.  41055.  52340
## 10       45  23061.  32275.  42860
## 11       50  18862.  25606.  34420.
## 12       55  15878.  20745.  27309.
## 13       60  14729.  17774.  22291.
## 14       65  13514.  15031.  18052.
## 15       70  10764.  12417.  13971.
## 16       75   6942.  10257.  10840.
## 17       80   3856.   7586.   8633
## 18       85   3960.   7761.  14743.
```

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

```
## # A tibble: 18 x 4
##    aggr.age  `1991`  `2001`  `2011`
##  *    <dbl>   <dbl>   <dbl>   <dbl>
##  1        0 109160. 122675. 141877
##  2        5  97223. 121785. 125463.
##  3       10  88280. 114264. 120105
##  4       15  78562. 101700. 115774.
##  5       20  65210.  88491. 104135.
##  6       25  52213.  74629.  88193.
##  7       30  41391.  59689.  73515.
##  8       35  32862.  46359.  60487.
##  9       40  26774.  35860.  48039.
## 10       45  22106.  28116.  37303
## 11       50  18181.  22365.  28438.
## 12       55  14816.  18080.  22206.
## 13       60  12414.  15108.  17858
## 14       65  10701.  12181.  13721.
## 15       70   8612.   9301.  10158.
## 16       75   5570.   7009.   7388.
## 17       80   2930.   4888.   5172.
## 18       85   2432.   4509.   7617
```

***Thiele log-Normal Hump RW***

```
##    user  system elapsed
##   31.33    0.52   31.83
```

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

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

```
## Warning in fit_tmb(input.thiele.loghump.oag.vec.RW.re, inner_verbose = FALSE, : convergence error: fals
```

```
##    user  system elapsed
##   25.63    0.33   25.94
```

```
## [1] "false convergence (8)"
```

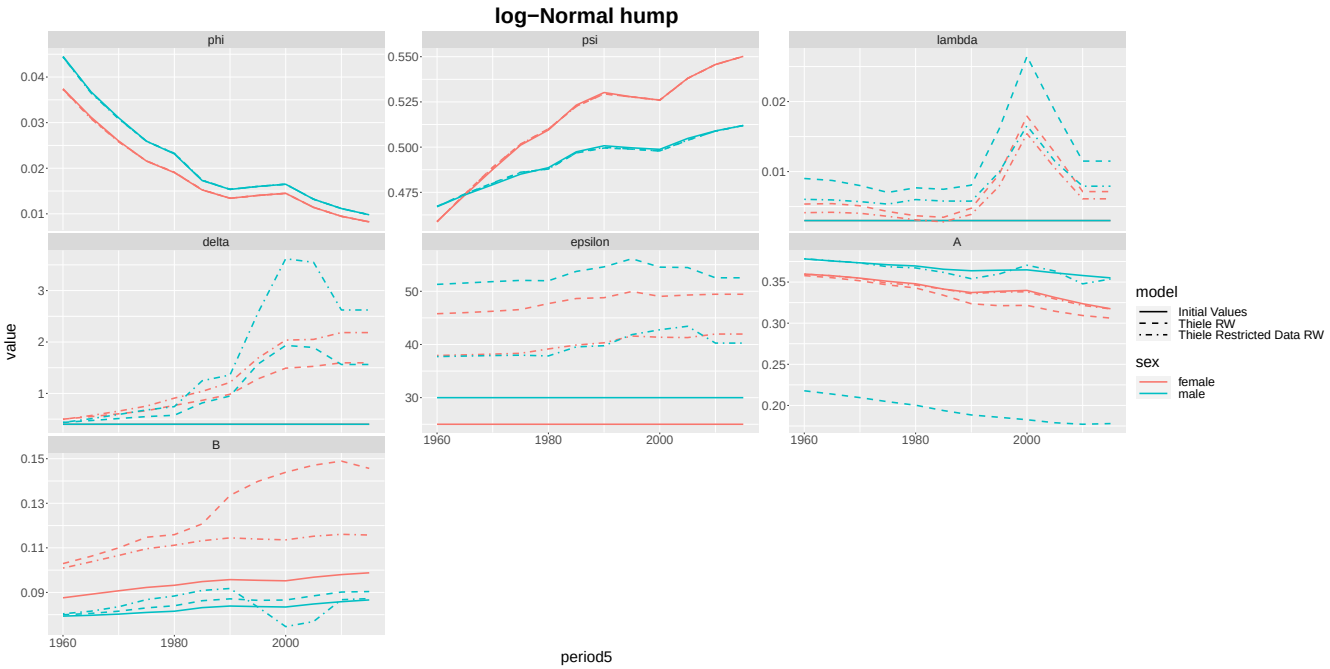


Figure 1: Estimated parameters


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


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

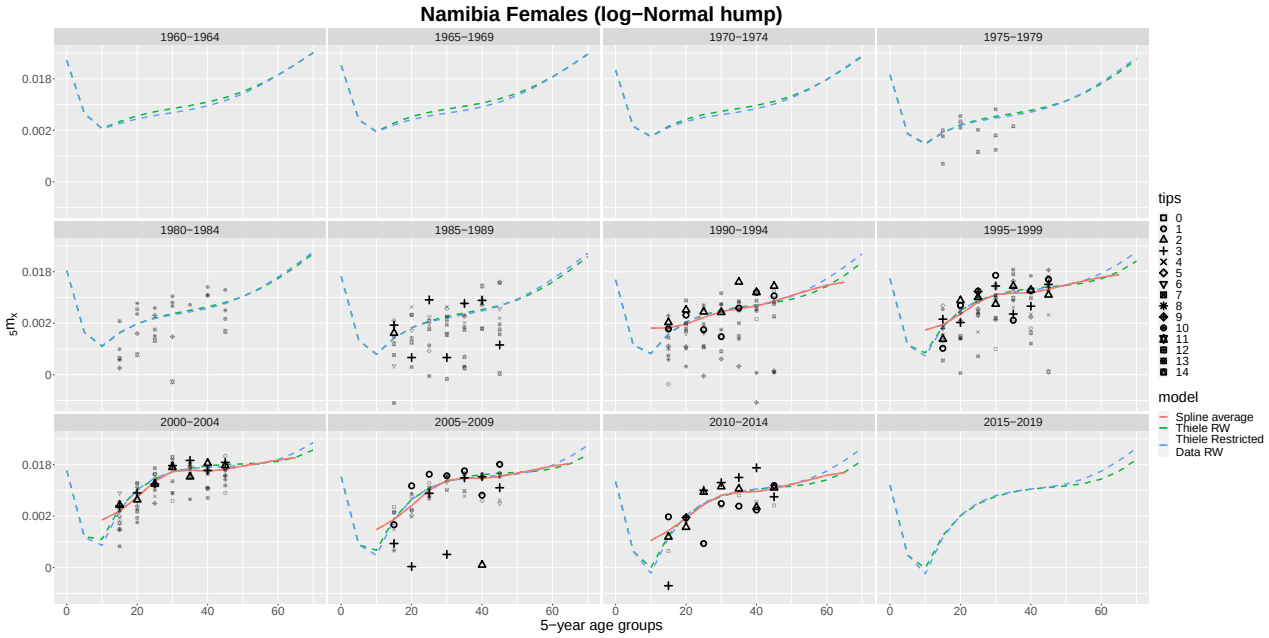


Figure 4: Mortality Schedules

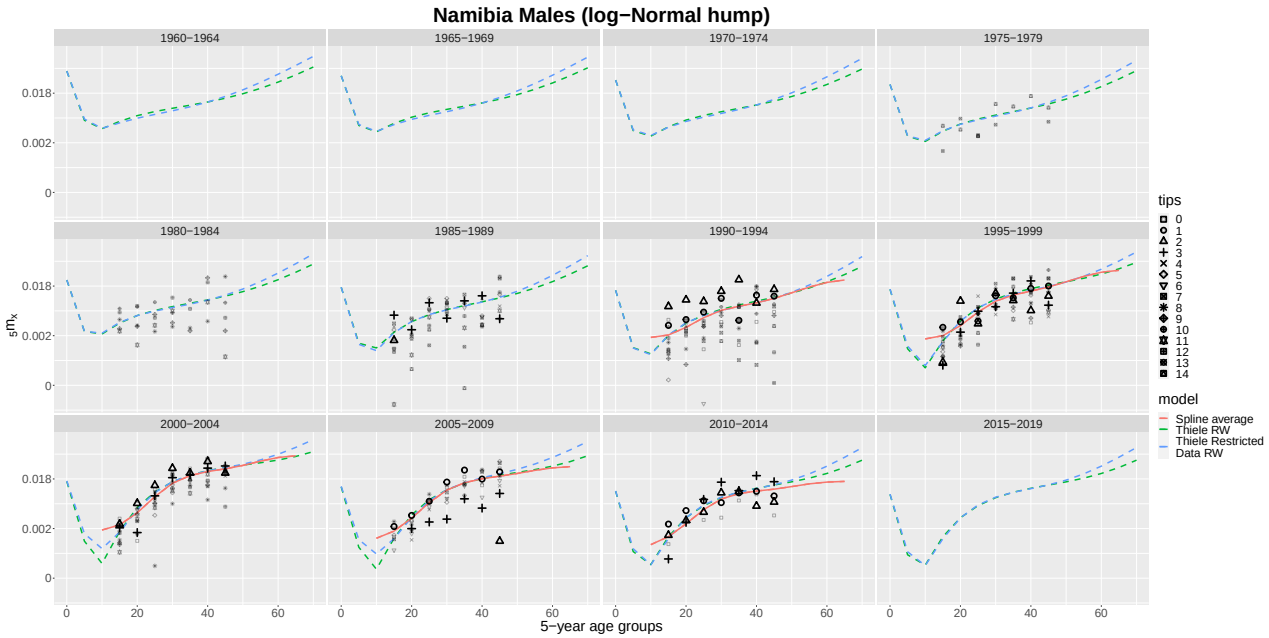


Figure 5: Mortality Schedules

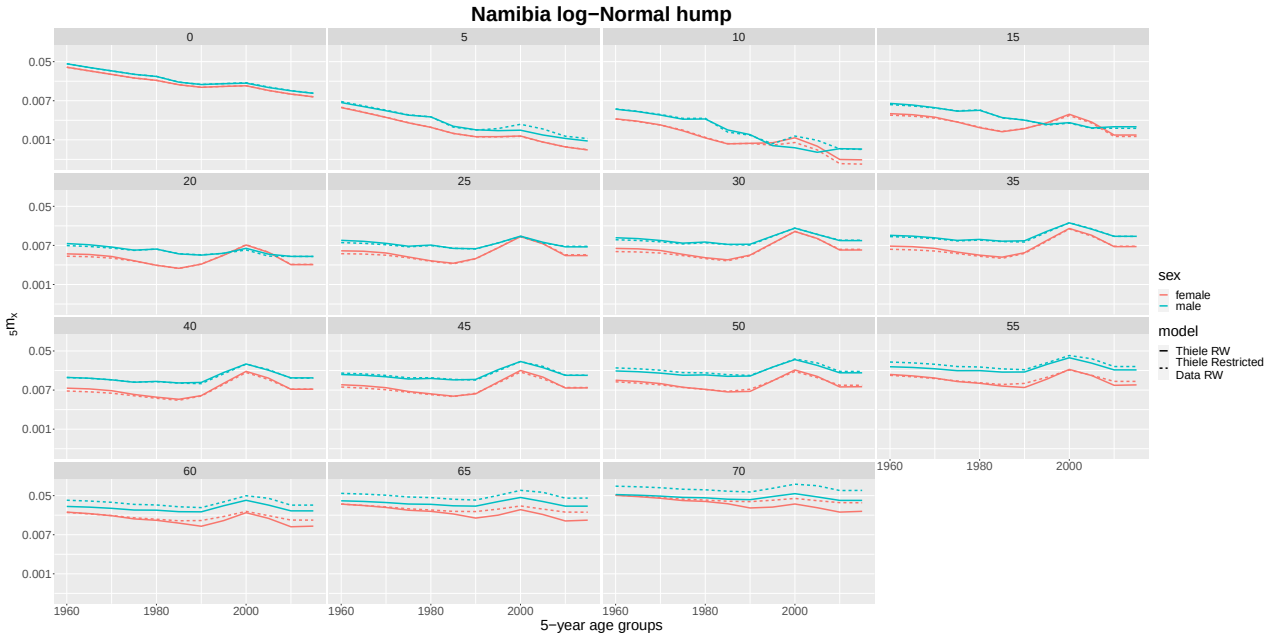


Figure 6: Mortality Schedules

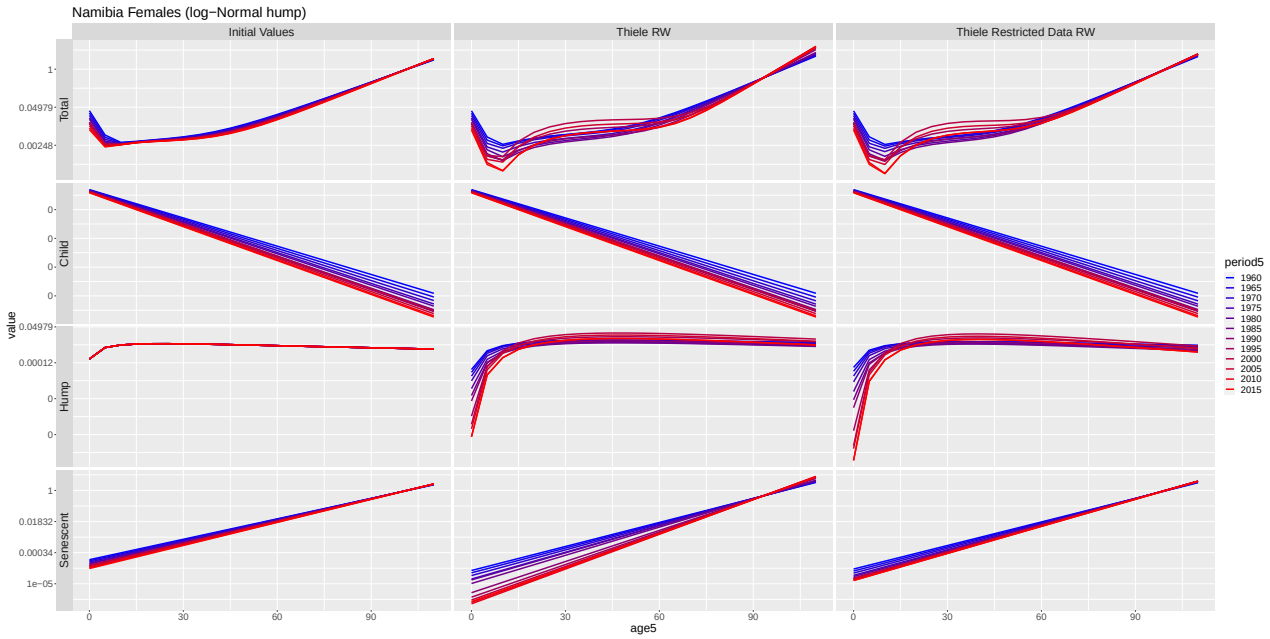


Figure 7: Thiele Decomposed

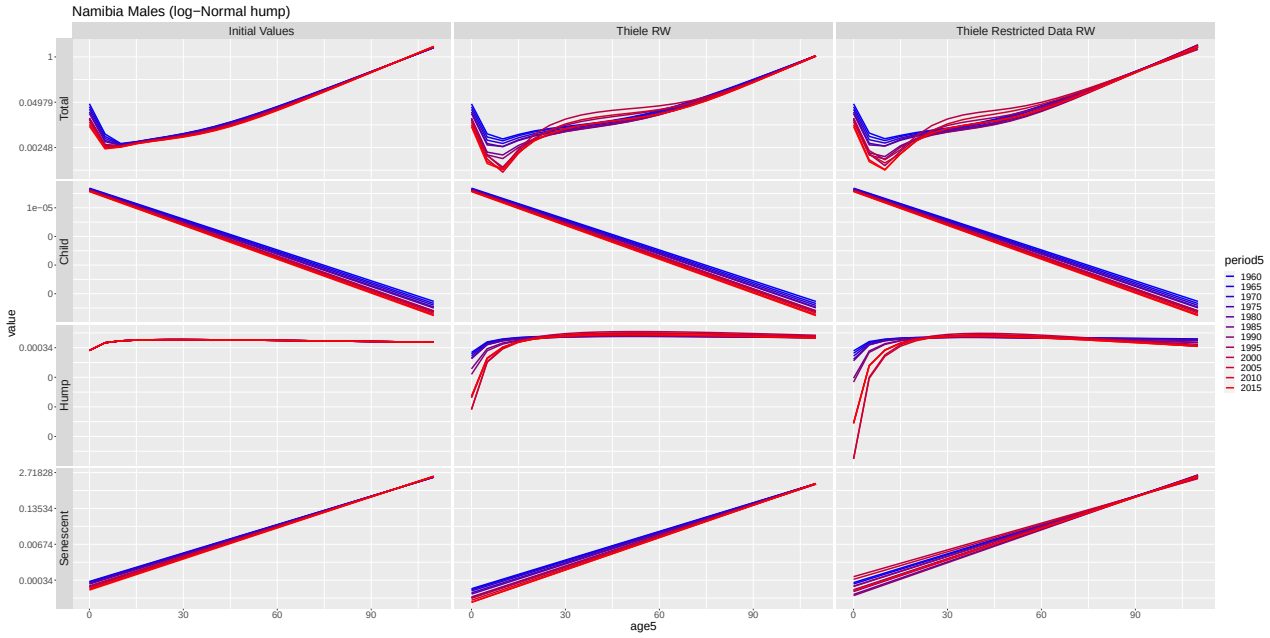


Figure 8: Thiele Decomposed

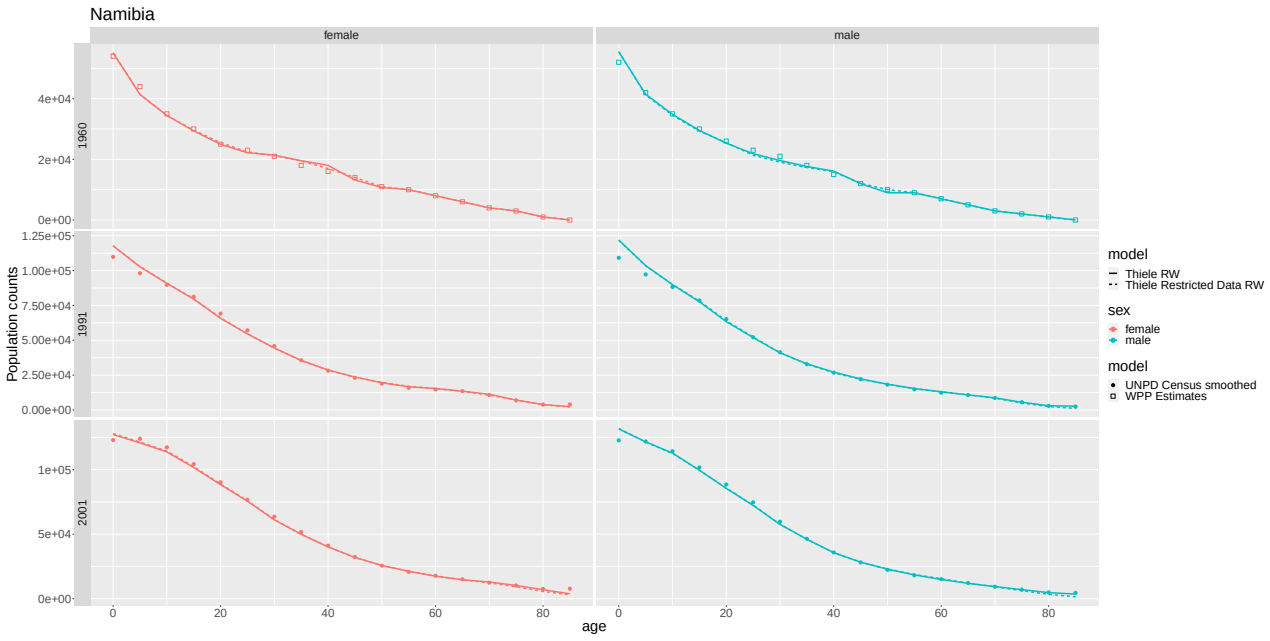


Figure 9: Population


Figure 10: Population

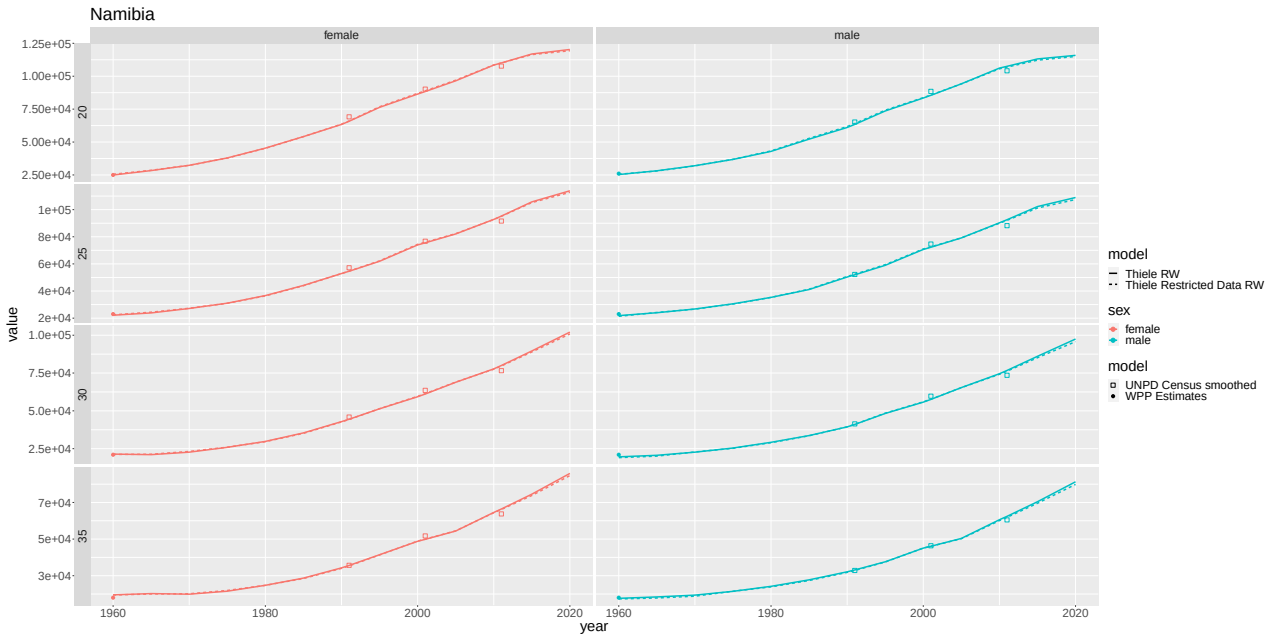


Figure 11: Population

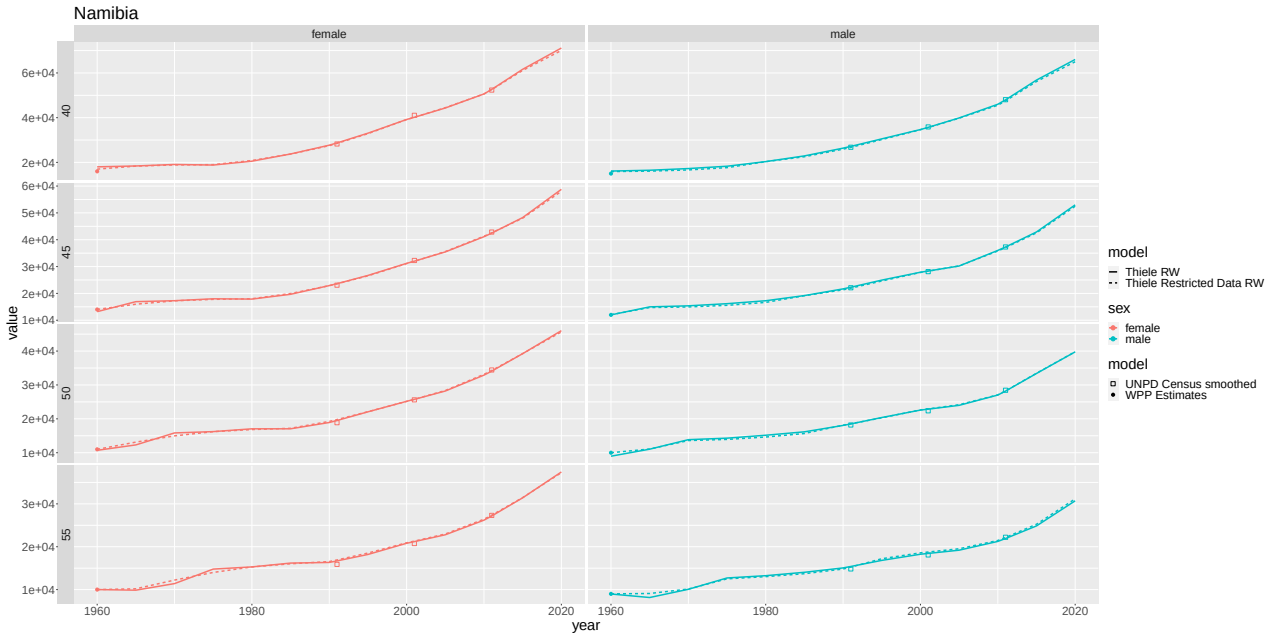


Figure 12: Population

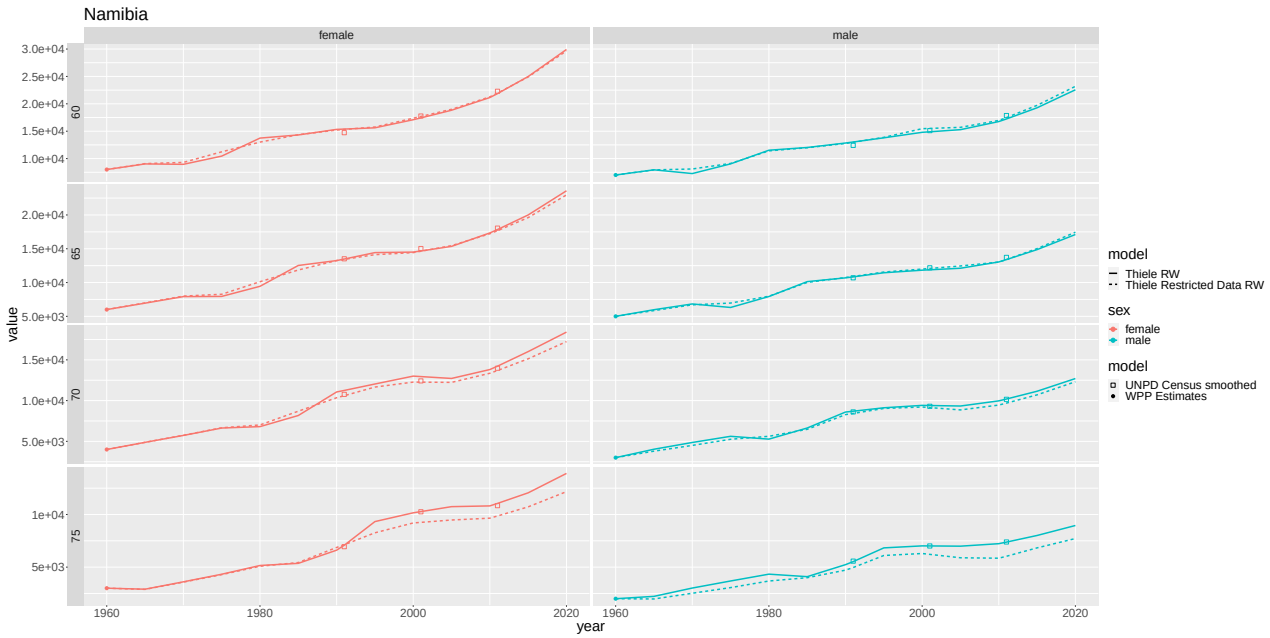


Figure 13: Population

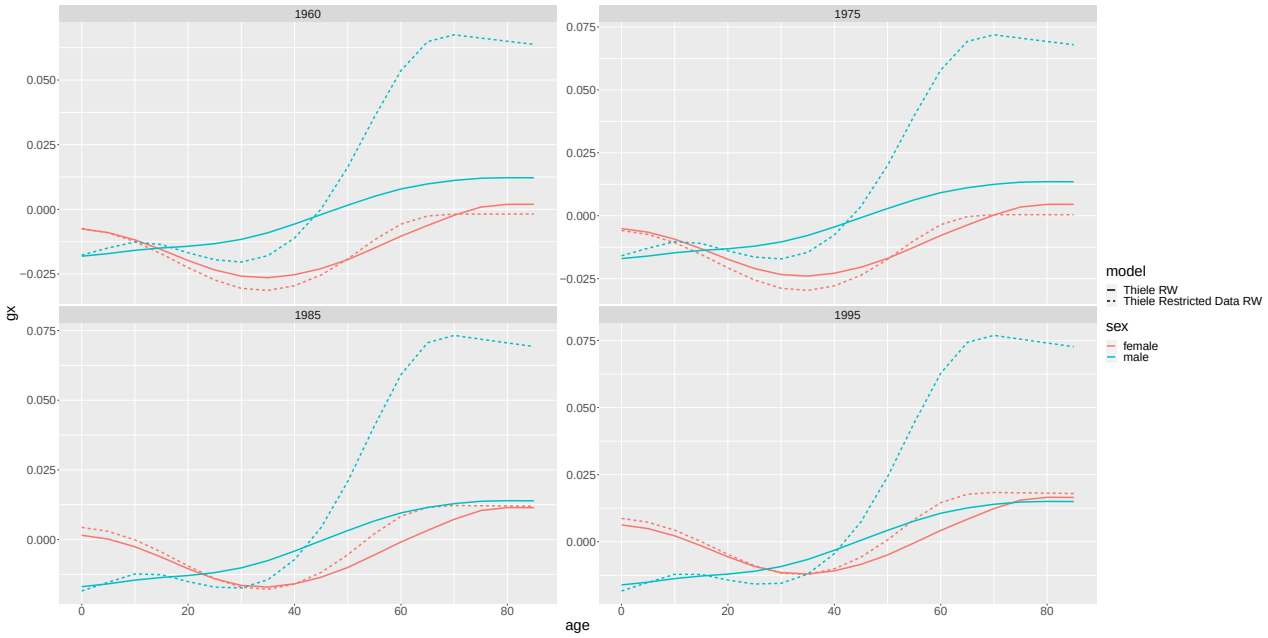


Figure 14: Migration


Figure 15: Migration

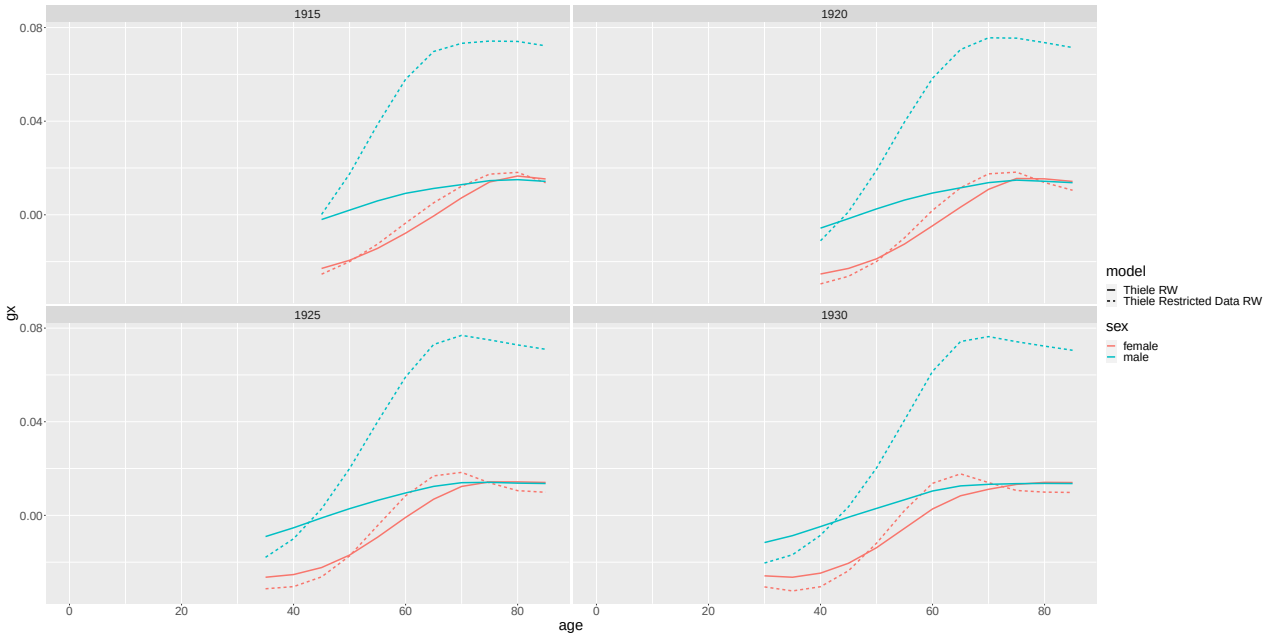


Figure 16: Migration

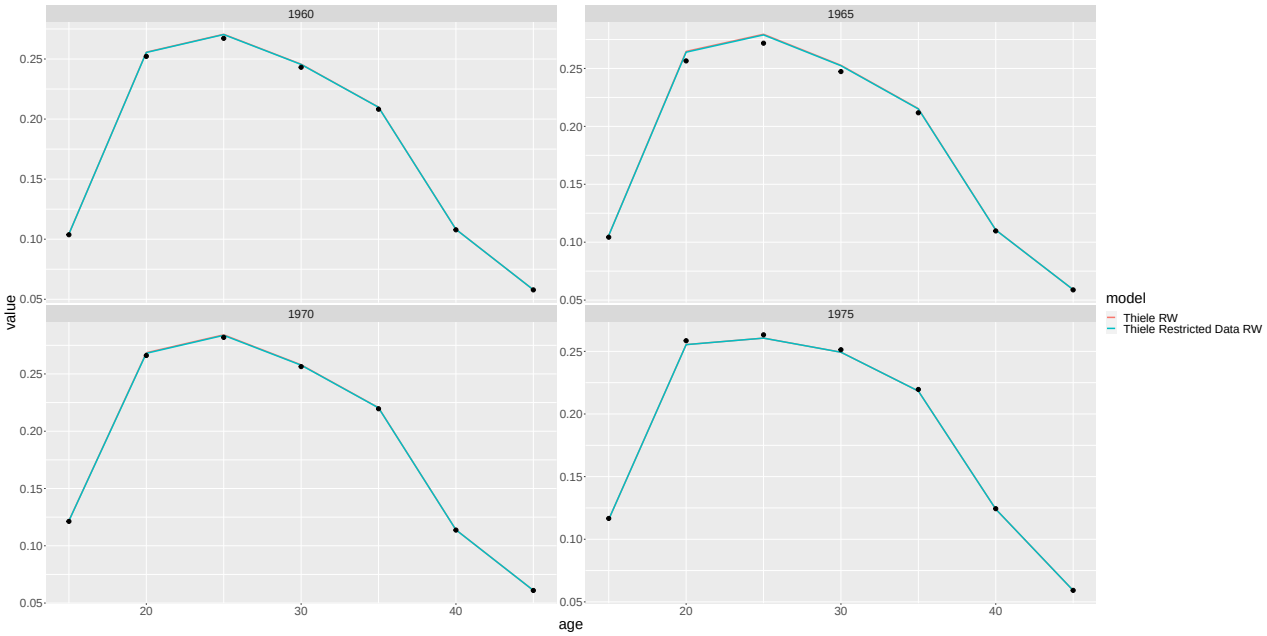


Figure 17: Fertility

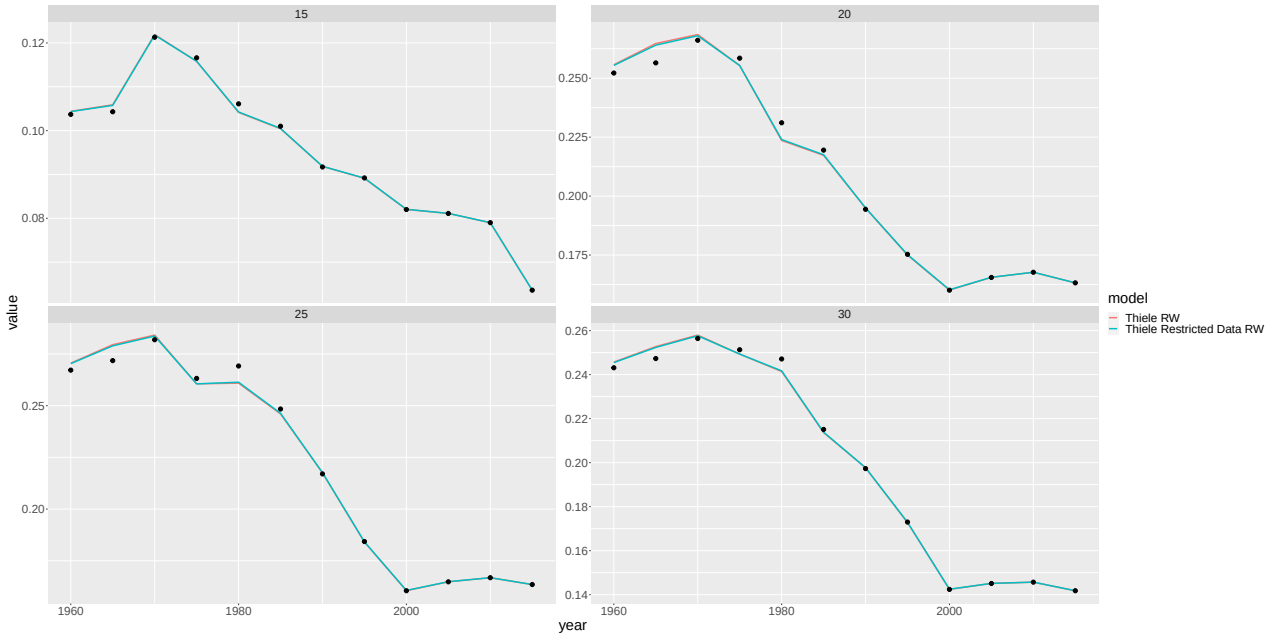


Figure 18: Fertility