

# **National, regional, and global sex ratios of infant, child, and under-5 mortality and identification of countries with outlying ratios: a systematic assessment**

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# 1 ABBREVIATIONS

CMR	Child mortality rate
DHS	Demographic and Health Survey
GBD	Global Burden of Disease
IMR	Infant mortality rate
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
SRB	sex ratio at birth
SRS	Sample Registration System
U5MR	Under-5 mortality rate
UN IGME	United Nations Inter-agency Group for Child Mortality Estimation
VR	Vital Registration
WHO	World Health Organization

# 2 METHODS

## 2.1 Data

An overview of the data source is given in Table I. The full list of data source for all countries is in Table I2.

Data source	Age group [0, 1)	Age group [1, 5)	Age group [0, 5)
Census Direct	6	4	0
Census Indirect	0	0	90
DHS Direct	1284	1023	0
DHS Indirect	0	0	10
MICS Direct	78	55	0
MICS Indirect	0	0	335
Other DHS Direct	293	265	0
Other DHS Indirect	1	1	25
Others Direct	140	143	0
Others Indirect	4	4	165
SRS	74	66	12
VR	3057	2949	0

Table 1: **Distribution of observations by source type and age group.** Observations are grouped by source type and age groups. “Direct” refers to observations obtained from full birth histories while “Indirect” refers to observations obtained from summary birth histories. DHS: Demographic and Health Surveys; MICS: Multiple Indicator Cluster Surveys; SRS: Sample Registration System; VR: Vital Registration.

## 2.2 Sex ratio model

**Notation** The sex ratios<sup>1</sup> for infant, child and under-5 mortality are denoted by  $S_{a,c,t}$  for country  $c$ , year  $t$  and age group  $a = 1, 4, 5$ , referring to infant, child and under-5 sex ratios respectively (age groups [0, 1), [1, 5), and [0, 5)). Total infant, child, and under-5 mortality rates are denoted by  $Q_{a,c,t}$  for the corresponding age group and country-year, referring to the UN IGME (United Nations Inter-agency Group for Child Mortality

<sup>1</sup>“sex ratio” as used in this appendix refers to the ratio of male to female mortality rates, unless otherwise specified.

Estimation) estimates unless otherwise noted. The  $j$ -th observed ratio of male to female mortality is denoted by  $s_{a,j}$  in country  $c[a,j]$ , year  $t[a,j]$  for  $a = 1, 4, 5$ .

**Infant and child sex ratio models**  $S_{a,c,t}$  for  $a = 1, 4$  is modeled as follows:

$$\begin{aligned} S_{a,c,t} &= W_{a,c,t} \cdot P_{a,c,t}, \\ W_{a,c,t} &= f^{(a)}(Q_{a,c,t}), \end{aligned}$$

where  $f^{(a)}(\cdot)$  represents the relation between the level of mortality for both sexes combined and the expected sex ratio on a global level, and  $P_{a,c,t}$  represents the relative advantage or disadvantage of girls to boys compared to other countries at similar mortality rates, as indicated by the data in the country.

The country multipliers  $P_{a,c,t}$  were estimated with a time series model:

$$\begin{aligned} \log(P_{a,c,t}) &= \beta_{a,c} + \varepsilon_{a,c,t}, \\ \varepsilon_{a,c,t} &\sim N(\rho \cdot \varepsilon_{a,c,t-1}, \sigma_\varepsilon^2), \end{aligned}$$

where the multipliers fluctuate around country-specific level  $\beta_{a,c}$ . The fluctuations  $\varepsilon_{a,c,t}$  were modeled with an autoregressive time series model of order one (AR(1)).

Country-specific levels  $\beta_{a,c}$  for  $a = 1, 4$ , representing the average level difference in  $\log(P_{a,c,t})$  across countries, were estimated using a hierarchical model (¶, 2):

$$\beta_{a,c} \sim t_3(\mu = 0, \sigma^2 = \sigma_{a,\beta}^2, \nu = 3)T(\log(1.6)),$$

where a  $t$ -distribution with three degrees of freedom was chosen to allow for countries with outlying levels. The truncation was imposed to exclude the possibility of extreme (and implausible) median country-specific levels (here the median levels are restricted to be smaller than 1.6).

**Specification of the global relations between infant and child mortality and their expected sex ratios** We used flexible penalized B-spline regression models (3, 4) to estimate the global relation between total mortality and expected sex ratios, denoted by function  $f^{(a)}(\cdot)$ , for age groups  $a = 1, 4$ . The function  $f^{(a)}(q)$  for some value  $q$  for total mortality was specified as follows:

$$\log(f^{(a)}(q)) = \sum_{k=1}^{K_a} B_k^{(a)}(q) \alpha_k^{(a)}, \quad (1)$$

where  $B_k^{(a)}(q)$  refers to the  $k$ -th B-spline evaluated at  $q$  and  $\alpha_k^{(a)}$  to the  $k$ -th spline coefficients. The expected sex ratio for country  $c$ , year  $t$  with mortality  $Q_{a,c,t}$  is given by  $W_{a,c,t} = f^{(a)}(Q_{a,c,t})$  for  $a = 1, 4$  (where  $Q_{a,c,t}$ 's are rounded to three decimal places to reduce the number of splines evaluations).

The B-splines used in the regression models are illustrated in Figure 1. We used symmetric third-order polynomials, equally spaced on the log-transformed total mortality scale (knots are set to be 0.3 apart). The resulting splines add up to unity at any level of total mortality. To avoid extreme extrapolations, splines are combined for total mortality less than 0.005 for both age groups, and for total mortality greater than the 95-th percentile of  $Q_{a,c,t}$  for the age-group specific country-years included in the data set.

When fitting the splines model to observations, second-order differences in adjacent splines coefficients were penalized to guarantee smoothness of the global relation between total mortality and expected sex ratios. The remainder of this subsection discusses the implementation details.

The splines regression model is specified as follows:

$$\log(f^{(a)}(\tilde{\mathbf{q}}^{(a)})) = \tilde{\mathbf{B}}^{(a)} \boldsymbol{\alpha}^{(a)}, \quad (2)$$

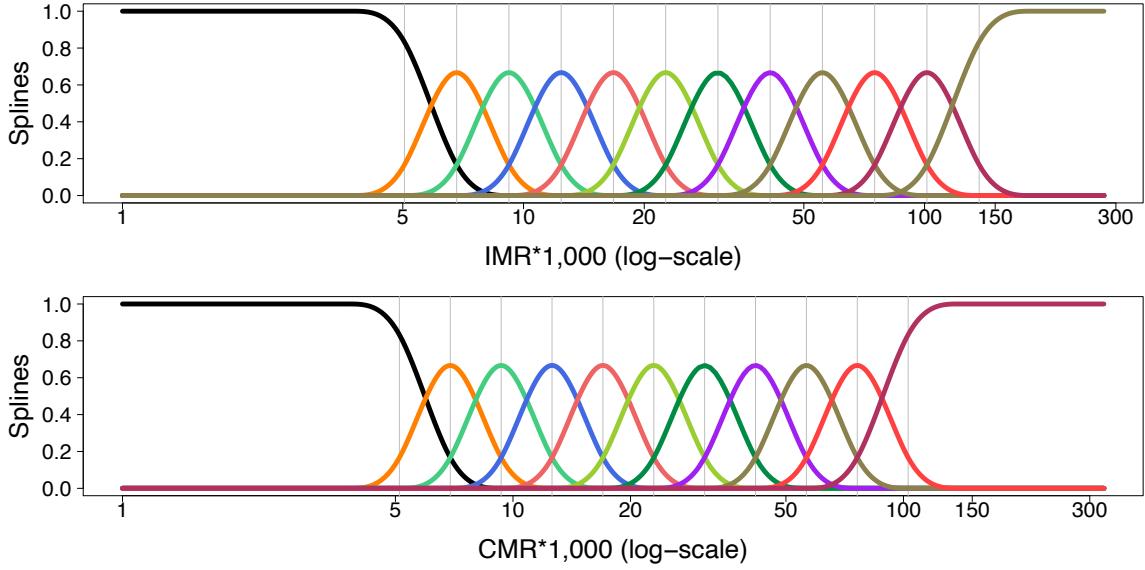


Figure 1: Illustration of the B-splines used for estimating the global relation between sex ratios and total mortality for age groups  $[0, 1)$  and  $[1, 5)$ . Each B-spline is plotted in a different color.

where  $\tilde{\mathbf{q}}^{(a)}$  represents the vector of unique values  $Q_{a,c,t}$  (rounded to three digits),  $\tilde{\mathbf{B}}^{(a)} = \mathbf{B}^{(a)}(\tilde{\mathbf{q}}^{(a)})$  the matrix of splines evaluated at each entry of  $\tilde{\mathbf{q}}^{(a)}$ , and  $\boldsymbol{\alpha}^{(a)}$  the vector of splines coefficients of length  $K_a$ . The splines equation can be written as follows (4, 5, 6):

$$\begin{aligned}\tilde{\mathbf{B}}^{(a)}\boldsymbol{\alpha}^{(a)} &= \tilde{\mathbf{B}}^{(a)}\mathbf{G}^{(a)}\mathbf{b}^{(a)} + \mathbf{Z}^{(a)}\mathbf{e}^{(a)}, \\ \mathbf{G}^{(a)} &= (\mathbf{1}_{K_a} \mathbf{g}_{K_a}), \text{ where } \mathbf{g}_{K_a} = (1 - K_a/2, \dots, K_a - K_a/2)', \\ \mathbf{Z}^{(a)} &= \tilde{\mathbf{B}}^{(a)}\mathbf{D}'_{K_a}(\mathbf{D}_{K_a}\mathbf{D}'_{K_a})^{-1},\end{aligned}\tag{3}$$

where the elements of difference matrix  $\mathbf{D}_K$  are given by  $D_{K,i,i} = D_{K,i,i+2} = 1$ ,  $D_{K,i,i+1} = -2$  and  $D_{K,i,j} = 0$  otherwise. The first part in Eq.(3),  $\tilde{\mathbf{B}}^{(a)}\mathbf{G}^{(a)}\mathbf{b}^{(a)}$ , describes the linear change in the expected sex ratio, and the second part  $\mathbf{Z}^{(a)}\mathbf{e}^{(a)}$  describes the fluctuations around the linear trend. The unknown parameters are given by:

$$\begin{aligned}\mathbf{b}^{(a)} &= (b_1^{(a)}, b_2^{(a)})', \\ \mathbf{e}^{(a)} &= \mathbf{D}_{K_a}\boldsymbol{\alpha}^{(a)},\end{aligned}$$

where  $\mathbf{e}^{(a)} = (e_1^{(a)}, \dots, e_{J_a}^{(a)})'$ , with  $J_a = K_a - 2$  and  $e_q^{(a)} = \Delta^2\alpha_{q+2}^{(a)}$  for  $q = 1, \dots, J_a$ . Second-order differences are penalized by imposing

$$e_q^{(a)} \sim N(0, \sigma_u^2), \text{ for } q = 1, \dots, J_a,$$

where variance  $\sigma_u^2$  determines the extent of smoothing. Spread out prior distributions were used for the splines model parameters.

**Derivation of sex ratio estimates for under-5 mortality rate** The sex ratio for under-5 mortality rate (U5MR),  $S_{5,c,t}$  for country  $c$  in year  $t$ , was derived from  $S_{1,c,t}$  and  $S_{4,c,t}$  through standard cohort equations. In particular, male and female mortality rates for infants and children were derived as follows (leaving out country and year subscripts, and using superscripts  $M$  and  $F$  to denote male and female-specific indicators):

$$Q_a^M = Q_a/(w_a + (1 - w_a)/S_a),\tag{4}$$

$$Q_a^F = Q_a^M/S_a,\tag{5}$$

for  $a = 1, 4$ , where  $w_1$  refers to the ratio of male live births over total live births and  $w_4$  to the ratio of male survivors to age one over the total number of survivors up to age one:

$$w_1 = B_1^M / B_1 = \frac{SRB}{1 + SRB}, \quad (6)$$

$$w_4 = B_4^M / B_4 = \frac{B_1^M \cdot (1 - Q_1^M)}{B_1 \cdot (1 - Q_1)} = w_1 \cdot \frac{(1 - Q_1^M)}{(1 - Q_1)}, \quad (7)$$

where  $B_1$  refers to the total number of live births,  $B_4$  to the number of survivors up to age one (approximated by the number of live births times total infant mortality rate (IMR)), and SRB refers to the sex ratio at birth, which is set at 1.05 for all country-years. Given sex-specific mortality for infants and children, sex-specific U5MR is obtained with the following equality:

$$Q_5 = 1 - (1 - Q_4)(1 - Q_1),$$

for males and females, which are then used to obtain U5MR sex ratios  $S_{5,c,t} = Q_{5,c,t}^M / Q_{5,c,t}^F$ .

The expected sex ratio  $W_{5,c,t}$  for the country-year of interest was derived in a similar fashion, using  $W_{1,c,t}$  and  $W_{4,c,t}$  instead of  $S_{1,c,t}$  and  $S_{4,c,t}$ . Finally, country multiplier  $P_{5,c,t} = S_{5,c,t} / W_{5,c,t}$ .

Contrary to age groups [0, 1) and [1, 5), there is no function that describes the global relation between total U5MR and the expected sex ratio for the U5MR because this expected sex ratio depends on total IMR and total CMR (and their associated expected sex ratios). To visualize the global relation between total U5MR and the expected sex ratio, a Loess curve was fitted to all estimates of combinations  $(Q_{5,c,t}, W_{5,c,t})$ . The resulting relation is denoted by  $\tilde{f}^{(5)}(\cdot)$ .

## 2.3 Data model

For most observations, observed sex ratios for IMR and CMR were used. To avoid using data twice, observed sex ratios for U5MR were not included if information on IMR and CMR was included. There are two exceptions: (1) for observations from summary birth histories, only sex ratios for U5MR were used (unless these were missing while the sex ratios for IMR and CMR were available); (2) for a small number of observations for which information on sex ratios for IMR was missing, information on the sex ratio for U5MR was used instead.

For observations on age groups  $a = 1$  and  $4$ , the data model was given by

$$\log(s_{a,j}) \sim N(\log(S_{a,c[a,j],t[a,j]}), \sigma_{a,j}^2 + \omega_{a,x[a,j]}^2), \text{ for } a = 1, 4,$$

where  $s_{a,j}$  is the  $j$ -th observed ratio of male to female mortality for age group  $a$  in country  $c[a,j]$ , year  $t[a,j]$  for  $a = 1, 4$ , and  $x[a,j]$  is the source type of that observation (see Table 1 for the distribution of source types). The variance of the log-transformed observation is the sum of sampling variance  $\sigma_{a,j}^2$  and non-sampling variance  $\omega_{a,x[a,j]}^2$  (explained further below).

With similar notation, the data model for observations from age group  $[0, 5)$  ( $a = 5$ ) was given by:

$$\log(s_{5,j}) \sim t(\mu = \log(S_{5,c[5,j],t[5,j]}), \sigma^2 = \sigma_{5,j}^2 + \omega_{5,x[5,j]}^2, \nu = \nu_5),$$

which is a  $t$ -distribution with  $\nu_5$  degrees of freedom. A  $t$ -distribution, as opposed to a normal distribution, was used because additional analysis suggested that more outliers were present in the observations for this age group. A spread out prior distribution was assigned to the degrees of freedom  $\nu_5$ .

Sampling variance was given for a large subset of DHS and MICS observations. For observations from vital registration systems, a Monte Carlo simulation was used to approximate the stochastic variances based on a synthetic cohort approach (explained below). For all the other observations with missing standard errors, the standard error on the log-scale was set at 15%, approximately equal to the median standard error in the data set of non-VR observations. Non-sampling variance parameter  $\omega_{a,x}^2$  was estimated by source type and set to zero for observations from VR/SRS.

**Stochastic variance for observations from VR/SRS** For observations from VR/SRS, a Monte Carlo simulation was used to approximate the stochastic variance based on a synthetic cohort approach, assuming that for females as well as males:

$$D_1 \sim \text{Poisson}(A_1 Q_1),$$

and similarly

$$D_4 \sim \text{Poisson}(A_1(1 - Q_1)Q_4),$$

where  $D_a$  refers to the number of deaths in age group  $a = 1, 4$ ,  $Q_a$  to the total mortality rate,  $A_1$  refers to the midyear population aged  $[0, 1)$ .

## 2.4 Model summary

**Notation** Notation is summarized in Table 2.

Symbol	Description
$a$	Indicator for age group, where index $a = 1, 4, 5$ refers to age groups $[0, 1)$ , $[1, 5)$ and $[0, 5)$ respectively.
$t$	Indicator for year.
$c$	Indicator for country.
$j$	Indicator for observation.
$x$	Indicator for source type.
$S_{a,c,t}$	Sex ratio for age group $a = 1, 4, 5$ , country $c$ , year $t$ .
$Q_{a,c,t}$	Total mortality for age group $a = 1, 4, 5$ , country $c$ , year $t$ (given by UN IGME estimate).
$W_{a,c,t}$	Expected sex ratio for age group $a = 1, 4, 5$ , country $c$ , year $t$ .
$f^{(a)}(q)$	Expected sex ratio for age group $a = 1, 4$ for a given total mortality level $q$ .
$\mathbf{B}^{(a)}(q)$ and $\boldsymbol{\alpha}^{(a)}$	$\log(f^{(a)}(q)) = \mathbf{B}^{(a)}(q)\boldsymbol{\alpha}^{(a)}$ , where $\mathbf{B}^{(a)}(q)$ refers to the splines matrix of age group $a = 1, 4$ obtained for value $q$ , and $\boldsymbol{\alpha}^{(a)}$ refers to the vector of spline coefficients for age group $a = 1, 4$ .
$P_{a,c,t}$	Country-year-multiplier for age group $a = 1, 4, 5$ , country $c$ , year $t$ which represents the relative advantage or disadvantage of girls to boys compared to other countries at similar levels of total mortality.
$\beta_{a,c}$	Long-term median country multiplier for age group $a = 1, 4$ .
$\sigma_{a,\beta}^2$	Variance of long-term median country multiplier for age group $a = 1, 4$ .
$\rho$	Autoregressive parameter for AR(1) time series model for $\log(P_{1,c,t})$ and $\log(P_{4,c,t})$ .
$\sigma_\varepsilon^2$	Variance of distortion terms in AR(1) time series model for $\log(P_{1,c,t})$ and $\log(P_{4,c,t})$ .
$s_{a,j}$	The $j$ -th observed ratio of male to female mortality in country $c[a, j]$ , year $t[a, j]$ for $a = 1, 4, 5$ .
$\sigma_{a,j}^2$	The $j$ -th sampling variance for $\log(s_{a,j})$ for $a = 1, 4, 5$ .
$\omega_{a,x[a,j]}^2$	The $j$ -th non-sampling variance for $\log(s_{a,j})$ of source type $x[a, j]$ for $a = 1, 4, 5$ .
$\nu_5$	Degrees of freedom for $t$ -distribution for observations in age group $[0, 5)$ .

Table 2: Notation summary.

### Sex-ratio model

$$\begin{aligned}
S_{a,c,t} &= W_{a,c,t} \cdot P_{a,c,t}, \\
W_{a,c,t} &= f^{(a)}(Q_{a,c,t}), \\
\log(P_{a,c,t}) &= \beta_{a,c} + \varepsilon_{a,c,t}, \\
\varepsilon_{a,c,t} &\sim N(\rho \cdot \varepsilon_{a,c,t-1}, \sigma_\varepsilon^2), \\
\beta_{a,c} &\sim t_3(\mu = 0, \sigma^2 = \sigma_{a,\beta}^2, \nu = 3)T(\log(1.6)), \\
W_{a,c,t} &= f^{(a)}(Q_{a,c,t}), \text{ for } a = 1, 4, \\
\log(f^{(a)}(\tilde{\mathbf{q}}^{(a)})) &= \tilde{\mathbf{B}}^{(a)} \mathbf{G}^{(a)} \mathbf{b}^{(a)} + \mathbf{Z}^{(a)} \mathbf{e}^{(a)}, \\
\mathbf{b}^{(a)} &= (b_1^{(a)}, b_2^{(a)})', \\
\mathbf{e}^{(a)} &= \mathbf{D}_{K_a} \boldsymbol{\alpha}^{(a)}, \\
e_q^{(a)} &\sim N(0, \sigma_u^2), \text{ for } q = 1, \dots, J_a.
\end{aligned}$$

### Data model

$$\begin{aligned}
\log(s_{a,j}) &\sim N(\log(S_{a,c[a,j],t[a,j]}), \sigma_{a,j}^2 + \omega_{a,x[a,j]}^2), \text{ for } a = 1, 4, \\
\log(s_{5,j}) &\sim t(\mu = \log(S_{5,c[5,j],t[5,j]}), \sigma^2 = \sigma_{5,j}^2 + \omega_{5,x[5,j]}^2, \nu = \nu_5).
\end{aligned}$$

**Prior distributions** Spread out prior distributions are used for all non-country-specific parameters:

$$\begin{aligned}
\rho &\sim U(0, 1), \\
\sigma_\varepsilon &\sim U(0, 0.05), \\
\omega_{a,x} &\sim U(0, 2), \text{ for all } x \text{ and } a = 1, 4, 5, \\
\nu_5 &\sim U(3, 50), \\
\sigma_{1,\beta}^{-2} &\sim \text{Gamma}(1/2, 1/2 \cdot 0.03^2), \\
\sigma_{4,\beta}^{-2} &\sim \text{Gamma}(1/2, 1/2 \cdot 0.04^2), \\
b_1^{(1)} &\sim U(0, 0.3), \\
b_2^{(1)} &\sim U(-0.1, 0.1), \\
b_1^{(4)} &\sim U(0, 0.3), \\
b_2^{(4)} &\sim U(-0.1, 0.1), \\
\sigma_u &\sim U(0, 0.2).
\end{aligned}$$

## 2.5 Computing

We obtained samples from the posterior distributions of all model parameters using a Markov chain Monte Carlo (MCMC) algorithm, implemented in open source software packages R 3.0 (7) and JAGS 3.2.0 (Just Another Gibbs Sampler (8)), using R-packages **R2jags** (9) and **rjags** (10). Results were obtained from 24 chains; the total number of iterations in each chain was 150,000, the first 5,000 iterations were discarded as burn-in, and after additional thinning 8,640 samples from each chain were kept. Convergence of the MCMC algorithm and the sufficiency of the number of samples obtained were checked through visual inspection of trace plots and convergence diagnostics of Gelman and Rubin (11), implemented in the **coda** R-package (12).

Estimates of relevant quantities are given by the posterior medians while 90% uncertainty intervals were constructed from the 5th and 95th percentiles of the posterior sample, following the UN IGME convention of using 90% uncertainty intervals.

## 2.6 Model validation

Model performance was assessed through an out-of-sample validation. Given the retrospective nature of child mortality data and the occurrence of data in series, the training set was not constructed by leaving out observations at random, but based on including all available data in some year in the past (13); here 2006 was chosen. To construct the training dataset, all data that were collected in or after 2006 were removed. Fitting the model to the training dataset resulted in point estimates and uncertainty intervals that would have been constructed in 2006 based on the proposed method. To validate model performance, we calculated various validation measures (mean/median errors, coverage) based on the left-out observations and based on the estimates obtained from the full dataset and the estimates obtained from the training dataset.

For the left-out observations, errors are defined as  $e_{a,j} = s_{a,j} - \tilde{s}_{a,j}$ , where  $\tilde{s}_{a,j}$  denotes the posterior median of the predictive distribution for a left-out observation  $s_{a,j}$  based on the training dataset. Coverage is given by  $1/n \cdot \sum 1[s_{a,j} \geq l_{a,c[a,j],t[a,j]}] \cdot 1[s_{a,j} \leq u_{a,c[a,j],t[a,j]}]$ , where  $n$  denotes the total number of left-out observations considered and  $l_{a,c[a,j],t[a,j]}$  and  $u_{a,c[a,j],t[a,j]}$  the lower and upper bounds of the 90% predictions intervals for the  $j$ -th observation in age group  $a$ . The validation measures were calculated for 1,000 sets of left-out observations, where each set consisted of a random sample of one left-out observation per country. Reported results include the median of the validation measures based on the outcomes in the 1,000 sets.

“Updated” estimates, denoted by  $\hat{S}_{a,c,t}$  for country  $c$  in year  $t$ , refer to the sex ratio estimates obtained from the full dataset. The error in the estimate based on the training dataset is defined as  $e_{c,a,t} = \hat{S}_{a,c,t} - \tilde{S}_{a,c,t}$ ,

where  $\tilde{S}_{a,c,t}$  refers to the posterior median estimate based on the training dataset. Coverage was calculated in a similar manner as for the left-out observations, based on the lower and upper bound of the 90% uncertainty intervals for  $S_{a,c,t}$  obtained from the training dataset.

## 2.7 Sex-specific mortality and excess female mortality

**Sex-specific mortality** Sex-specific mortality estimates were obtained from estimated sex ratios and total mortality, as described in Eq.(4) to (7). To account for the uncertainty in the sex ratios as well as the uncertainty in total mortality, we combined posterior samples of sex-specific mortality based on the posterior samples of sex ratios (from our sex ratio model) with posterior samples of total mortality (instead of point estimates), obtained from UN IGME (14).

Estimated number of deaths for each country-year were calculated by sex using a period life table approach, and used to obtain regional estimates of sex-specific mortality rates.

**Excess female mortality** The global relation between expected sex ratios and total mortality rates for age groups  $a = 1, 4$  implies that for each value of male mortality  $Q_a^M$ , there exists an associated value of expected female mortality, here referred to as expected female mortality  $Q_a^{F*}$ , such that the ratio of male mortality over expected female mortality is equal to the expected ratio at the implied level of total mortality  $Q_a^*$ :

$$\frac{Q_a^M}{Q_a^{F*}} = f^{(a)}(Q_a^*), \quad (8)$$

where implied total mortality  $Q_a^* = w_a \cdot Q_a^M + (1 - w_a) \cdot Q_a^{F*}$ .

For all country-years, we calculated expected female mortality for age groups  $a = 1, 4$ ,  $Q_{a,c,t}^{F*}$  by minimizing the differences between the right and left-hand terms of Eq.(8).  $Q_{5,c,t}^{F*}$  followed from  $Q_{1,c,t}^{F*}$  and  $Q_{4,c,t}^{F*}$ .

Excess female mortality for all age groups was defined as:

$$E_{a,c,t} = Q_{a,c,t}^F - Q_{a,c,t}^{F*}.$$

Excess female deaths were defined as the number of deaths associated with the excess female mortality rate:

$$D_{a,c,t}^F - D_{a,c,t}^{F*},$$

where  $D_{a,c,t}^{F*}$  and  $D_{a,c,t}^F$  refer to the number of deaths associated with  $Q_{a,c,t}^{F*}$  and  $Q_{a,c,t}^F$  respectively.

### 3 RESULTS

#### 3.1 Validation results

We left out all observations that were collected in or after the year 2006: 1853 observations were left out, corresponding to 18.4% of all observations. Table 3 summarizes the results related to the left-out observations for the validation exercise. Median errors were very close to zero for left-out observations in age groups [0,1) and [1,5). Coverage of 90% prediction intervals was slightly higher than expected at 92% for age group [0, 1) and 94% for age group [1, 5).

Age group	[0, 1)	[1, 5)
Median error	-0.00	-0.00
Median absolute error	0.10	0.16
% of left-out observations below 90% prediction interval	4.4	3.2
% of left-out observations above 90% prediction interval	3.6	2.9
<b>Expected proportions (%)</b>	<b>5</b>	<b>5</b>

Table 3: **Validation results for left-out observations by age group.** Errors are defined as the difference between a left-out observation and the posterior median of its predictive distribution.

Table 4 shows the results for the comparison between estimates obtained based on the full data set, and estimates based on the training set. Median errors and the median absolute errors were close to zero and the proportion of updated estimates that fell outside the uncertainty intervals constructed based on the training set was small.

Age group	[0, 1)		[1, 5)		[0, 5)	
	2000	2005	2000	2005	2000	2005
Median error	-0.00	-0.00	0.00	0.00	-0.00	-0.00
Median absolute error	0.01	0.01	0.01	0.01	0.01	0.01
Below 90% uncertainty interval (%)	0.0	0.0	0.0	0.0	0.0	0.0
Above 90% uncertainty interval (%)	2.1	1.0	0.5	0.5	2.1	1.5
<b>Expected proportions (%)</b>	<b>≤5</b>	<b>≤5</b>	<b>≤5</b>	<b>≤5</b>	<b>≤5</b>	<b>≤5</b>

Table 4: **Summary of differences in sex ratio estimates in observation years 2000 and 2005 based on training set and full data set.** Errors are defined as the differences between estimates based on the full dataset and the training set. The proportions refer to the proportions (%) of countries in which the median sex ratio estimates based on the full data set fall below or above their corresponding 90% uncertainty intervals based on the training dataset. The results are broken down by age groups and observation years.

We also verified that the global relations between total mortality and expected sex ratios and resulting country estimates were not substantially affected by outlying countries by leaving out countries with multipliers that were 10% smaller or greater than one.

#### 3.2 Comparison of sex ratio estimates to estimates from the Global Burden of Disease Study

Figure 2 gives an overview of the differences between sex ratio estimates from our model (here referred to as UN IGME estimates) to estimates from the Global Burden of Disease (GBD) Study (15). GBD point estimates for U5MR sex ratios were obtained from sex-specific U5MR estimates. Uncertainty intervals could not be constructed from the published estimates.

Figure 2 shows that GBD estimates tend to be higher than UN IGME estimates. Figure 3 shows estimates for those countries with absolute differences greater than 0.15 in the year 2010 (five countries in total). Figure 4

shows country estimates for India and Jordan, where the estimates are in disagreement as to whether the sex ratio in 2010 was greater or smaller than one.

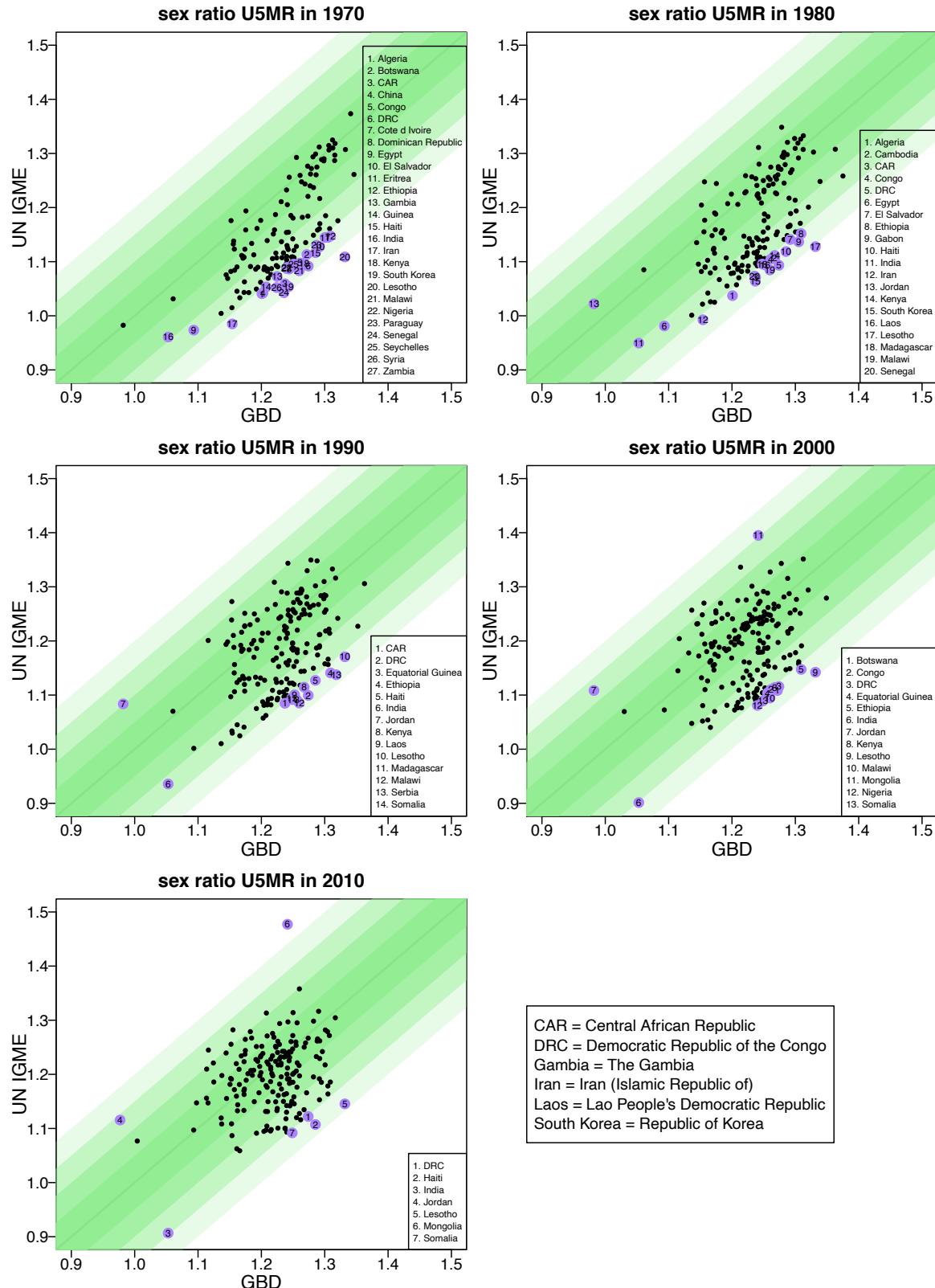
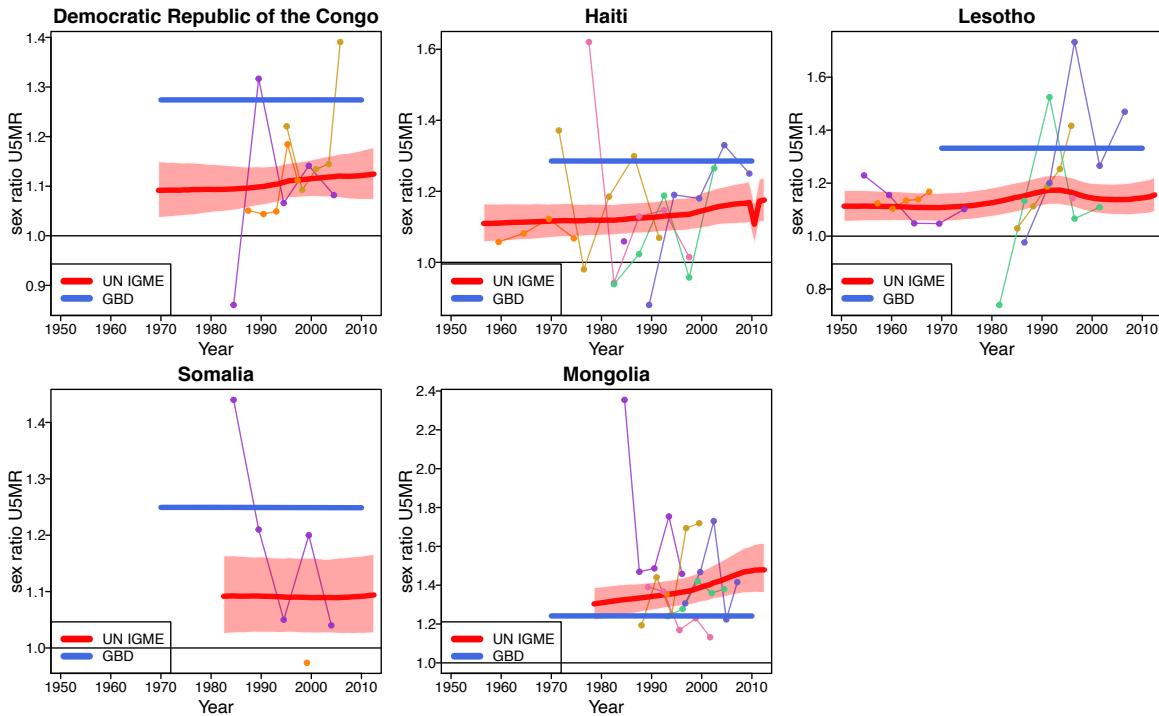
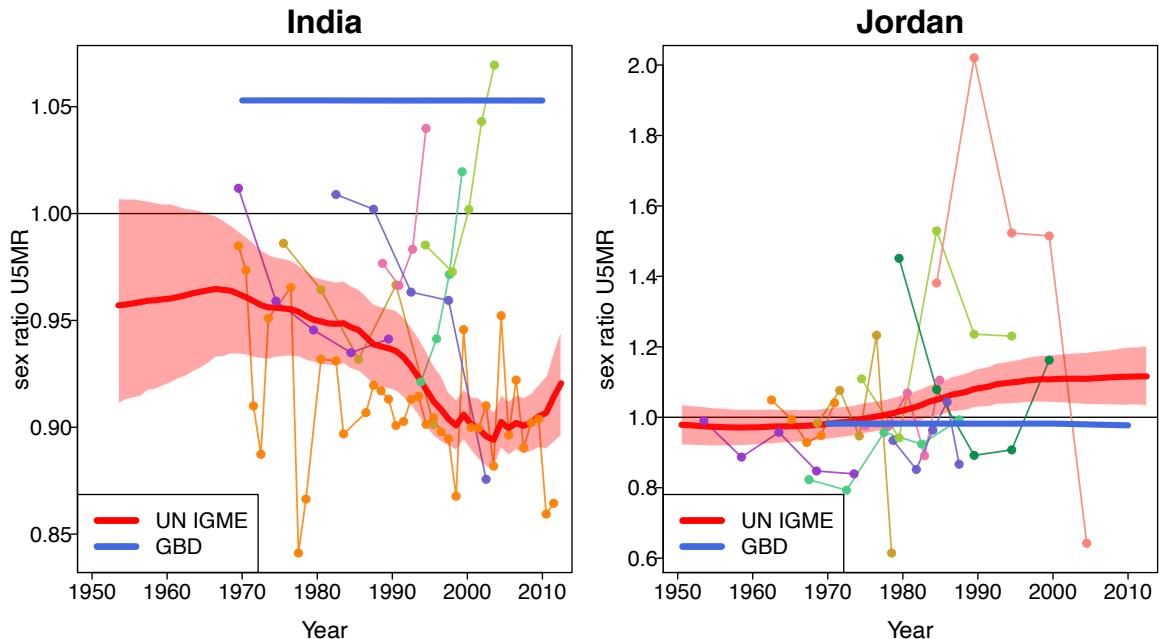


Figure 2: Comparison of UN IGME and GBD sex ratio estimates for 1970, 1980, 1990, 2000, and 2010. UN IGME estimates are plotted against GBD estimates. Green shades from dark to light refer to absolute differences of up to 0.05, 0.10, 0.15, and 0.20 respectively. Two types of estimates are highlighted in purple: (1) Estimates with absolute differences that are greater than 0.15; (2) Estimates where the GBD sex ratios is below one while the UN IGME estimate is above one, or vice versa. The highlighted countries are listed in the legend of each plot in short form. The full country names (if available) are listed in the right bottom of the plot.



**Figure 3: UN IGME and GBD sex ratio estimates for U5MR for Democratic Republic of the Congo, Haiti, Lesotho, Somalia, and Mongolia.** Selected countries are those with absolute differences between UN IGME and GBD estimates at 0.15 and above in 2010. Red lines and shades indicate UN IGME median estimates and 90% uncertainty intervals. Blue lines indicate GBD estimates. Dots refer to observations used by UN IGME, where different colors indicate different data series.



**Figure 4: UN IGME and GBD U5MR sex ratio estimates for U5MR for India and Jordan.** Selected countries are those with one estimate of sex ratio above one, and the other one below one in 2010. Red lines and shades indicate UN IGME median estimates and 90% uncertainty intervals. Blue lines indicate GBD estimates. Dots refer to observations used by UN IGME, where different colors indicate different data series.

## 4 REFERENCES

### References

- [1] Lindley DV, Smith AFM. Bayes Estimates for the Linear Model. *Journal of the Royal Statistical Society, Series B*. 1972;34:1–41.
- [2] Gelman A, Carlin JB, Stern HS, Rubin DB. *Bayesian Data Analysis*. 2nd ed. Boca Raton, Fl.: Chapman & Hall/CRC; 2004.
- [3] Eilers PHC, Marx BD. Flexible Smoothing with B-splines and Penalties. *Statistical Science*. 1996;11(2):89–121.
- [4] Eilers PHC, Marx BD. Splines, knots, and penalties. *Wiley Interdisciplinary Reviews: Computational Statistics*. 2010 Nov;2(6):637–653. Available from: <http://doi.wiley.com/10.1002/wics.125>.
- [5] Currie ID, Durban M. Flexible smoothing with P-splines: a unified approach. *Statistical Modelling*. 2002 Dec;2(4):333–349. Available from: <http://smj.sagepub.com/content/2/4/333>.
- [6] Eilers PHC. Discussion of: Verbyla, A. P., B. R. Cullis, M. G. Kenward, and S. J. Welham. "The Analysis of Designed Experiments and Longitudinal Data Using Smoothing Splines.". *Journal of the Royal Statistical Society*. 1999;Series C(48):300–311.
- [7] R Development Core Team. *R: A Language and Environment for Statistical Computing*. Vienna, Austria; 2013. Available from: <http://www.R-project.org/>.
- [8] Plummer M. JAGS: A program for analysis of Bayesian graphical models using Gibbs sampling. In: *Proceedings of the 3rd International Workshop on Distributed Statistical Computing (DSC 2003)*. March 20-22. Vienna, Austria; 2003. ISSN 1609-395X.
- [9] Su YS, Yajima M. R2jags: A Package for Running jags from R; 2011. R package version 0.02-17. Available from: <http://CRAN.R-project.org/package=R2jags>.
- [10] Plummer M. rjags: Bayesian graphical models using MCMC; 2011. R package version 3-5. Available from: <http://CRAN.R-project.org/package=rjags>.
- [11] Gelman A, Rubin D. Inference from iterative simulation using multiple sequences. *Statistical Science*. 1992;7:457–511.
- [12] Plummer M, Best N, Cowles K, Vines K. CODA: Convergence Diagnosis and Output Analysis for MCMC. *R News*. 2006;6(1):7–11. Available from: <http://CRAN.R-project.org/doc/Rnews/>.
- [13] Alkema L, Wong MB, Seah PR. Monitoring progress towards Millennium Development Goal 4: a call for improved validation of under-5 mortality rate estimates. *Statistics, Politics and Policy*. 2012 Jun;3(2). Available from: <http://www.degruyter.com/view/j/spp.2012.3.issue-2/2151-7509.1043/2151-7509.1043.xml>.
- [14] UNICEF, WHO, The World Bank, United Nations. *Levels & Trends in Child Mortality Report 2013: Estimates Developed by the UN Inter-Agency Group for Child Mortality Estimation*. 2013;Available from: [http://www.unicef.org/media/files/2013\\_IGME\\_child\\_mortality\\_Report.pdf](http://www.unicef.org/media/files/2013_IGME_child_mortality_Report.pdf).
- [15] Wang H, Dwyer-Lindgren L, Lofgren KT, Rajaratnam JK, Marcus JR, Levin-Rector A, et al. Age-specific and sex-specific mortality in 187 countries, 1970-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*. 2012 Dec;380(9859):2071–94.

## 5 SUPPLEMENTARY TABLES

**Table 5: Estimates and 90% uncertainty intervals for sex ratios for IMR in 1990 and 2012, the change in sex ratios from 1990 to 2012, sex-specific IMR in 2012, and ratios of estimated to expected female IMR and their change from 1990 to 2012 for the world, MDG regions, and all countries.** \* : Sex ratio is outlying in 1990. †: Sex ratio is outlying in 2012. ‡: Ratio of estimated to expected female mortality is significantly different from one. §: Change is significantly different from zero.

	Sex ratio IMR			Sex-specific IMR in 2012 (per 1,000)		Estimated/Expected female IMR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
World* †	1.13 [1.11; 1.14]	1.13 [1.12; 1.15]	0.01 [-0.01; 0.02]	37.3 [35.9; 38.7]	32.9 [31.7; 34.2]	1.05 [1.03; 1.06]‡	1.06 [1.04; 1.07]‡	0.01 [-0.01; 0.03]
Developed regions	1.29 [1.28; 1.29]	1.22 [1.20; 1.24]	-0.07 [-0.08; -0.05]§	5.8 [5.6; 6.1]	4.8 [4.6; 5.0]	0.97 [0.96; 0.98]‡	0.99 [0.98; 1.01]	0.03 [0.01; 0.04]§
Northern Africa* †	1.12 [1.09; 1.14]	1.18 [1.15; 1.22]	0.07 [0.03; 0.10]§	20.6 [18.7; 23.3]	17.4 [15.8; 19.5]	1.07 [1.05; 1.10]‡	1.06 [1.03; 1.09]‡	-0.01 [-0.05; 0.02]
Sub-Saharan Africa	1.17 [1.16; 1.19]	1.20 [1.17; 1.22]	0.03 [0.00; 0.05]§	70.1 [65.9; 74.7]	58.6 [55.1; 62.5]	1.00 [0.98; 1.01]	1.00 [0.98; 1.02]	0.00 [-0.02; 0.02]
Eastern Asia* †	1.11 [1.04; 1.19]	1.15 [1.07; 1.24]	0.04 [-0.03; 0.12]	12.9 [11.3; 15.0]	11.2 [9.8; 13.0]	1.10 [1.02; 1.18]‡	1.08 [1.01; 1.16]‡	-0.02 [-0.09; 0.06]
Southern Asia* †	1.07 [1.05; 1.09]	1.04 [1.01; 1.06]	-0.04 [-0.07; 0.00]§	46.2 [43.3; 49.2]	44.6 [41.7; 47.4]	1.10 [1.07; 1.12]‡	1.17 [1.14; 1.21]‡	0.08 [0.04; 0.12]§
South-eastern Asia*	1.25 [1.22; 1.28]	1.28 [1.23; 1.33]	0.03 [-0.01; 0.08]	27.7 [25.2; 30.4]	21.7 [19.7; 23.8]	0.96 [0.93; 0.98]‡	0.97 [0.94; 1.01]	0.01 [-0.02; 0.05]
Western Asia	1.18 [1.15; 1.21]	1.22 [1.18; 1.26]	0.04 [-0.01; 0.08]	22.2 [19.4; 25.5]	18.3 [16.0; 21.0]	1.02 [1.00; 1.05]	1.02 [0.98; 1.06]	0.00 [-0.04; 0.03]
Caucasus and Central Asia* †	1.27 [1.23; 1.33]	1.30 [1.24; 1.36]	0.02 [-0.03; 0.07]	36.0 [27.9; 47.1]	27.8 [21.5; 36.3]	0.93 [0.90; 0.97]‡	0.94 [0.89; 0.99]‡	0.01 [-0.03; 0.05]
Latin America and the Caribbean	1.23 [1.19; 1.26]	1.26 [1.23; 1.28]	0.03 [0.00; 0.06]	17.9 [17.1; 18.8]	14.3 [13.6; 15.0]	0.99 [0.96; 1.02]	0.99 [0.97; 1.02]	0.01 [-0.02; 0.03]
Oceania	1.20 [1.10; 1.30]	1.22 [1.11; 1.32]	0.02 [-0.06; 0.09]	46.3 [34.6; 62.8]	38.2 [28.4; 51.9]	1.00 [0.92; 1.09]	1.00 [0.91; 1.09]	0.00 [-0.07; 0.07]
Afghanistan	1.10 [1.04; 1.17]	1.12 [1.05; 1.19]	0.02 [-0.06; 0.09]	74.8 [65.1; 86.6]	66.8 [58.1; 77.7]	1.05 [0.99; 1.11]	1.06 [1.00; 1.13]	0.01 [-0.06; 0.08]
Albania	1.19 [1.09; 1.29]	1.21 [1.10; 1.31]	0.02 [-0.07; 0.10]	16.4 [10.0; 24.4]	13.6 [8.3; 20.3]	1.04 [0.95; 1.13]	1.04 [0.96; 1.14]	0.00 [-0.07; 0.08]
Algeria	1.21 [1.18; 1.25]	1.26 [1.19; 1.34]	0.05 [-0.03; 0.13]	19.1 [12.6; 29.1]	15.1 [9.9; 23.0]	1.01 [0.97; 1.04]	0.99 [0.94; 1.05]	-0.01 [-0.07; 0.05]
Andorra	1.22 [1.11; 1.35]	1.19 [1.08; 1.32]	-0.03 [-0.12; 0.06]	2.8 [2.5; 3.2]	2.4 [2.1; 2.7]	1.00 [0.91; 1.10]	1.00 [0.91; 1.10]	0.00 [-0.07; 0.08]
Angola	1.17 [1.08; 1.26]	1.18 [1.08; 1.28]	0.01 [-0.07; 0.09]	107.3 [76.0; 151.1]	91.1 [64.7; 128.5]	0.99 [0.92; 1.07]	0.99 [0.91; 1.08]	0.00 [-0.07; 0.08]
Antigua and Barbuda	1.26 [1.15; 1.38]	1.24 [1.13; 1.35]	-0.02 [-0.11; 0.07]	10.2 [7.5; 13.6]	8.2 [6.1; 11.1]	1.00 [0.91; 1.10]	1.00 [0.91; 1.10]	0.00 [-0.07; 0.07]
Argentina	1.26 [1.24; 1.28]	1.24 [1.20; 1.28]	-0.02 [-0.07; 0.02]	14.1 [13.4; 14.8]	11.3 [10.8; 11.9]	1.00 [0.98; 1.01]	1.01 [0.97; 1.04]	0.01 [-0.02; 0.05]
Armenia	1.23 [1.14; 1.33]	1.26 [1.16; 1.37]	0.02 [-0.06; 0.12]	16.3 [13.1; 20.4]	13.0 [10.5; 16.3]	0.99 [0.92; 1.07]	1.00 [0.92; 1.08]	0.01 [-0.06; 0.08]
Australia	1.28 [1.24; 1.31]	1.28 [1.23; 1.33]	0.00 [-0.06; 0.06]	4.6 [4.4; 4.9]	3.6 [3.4; 3.8]	0.96 [0.94; 0.99]‡	0.94 [0.90; 0.98]‡	-0.03 [-0.07; 0.02]
Austria	1.26 [1.22; 1.31]	1.24 [1.18; 1.31]	-0.02 [-0.09; 0.05]	3.7 [3.4; 4.0]	3.0 [2.7; 3.2]	0.97 [0.94; 1.01]	0.96 [0.91; 1.01]	-0.01 [-0.07; 0.05]
Azerbaijan†	1.18 [1.11; 1.25]	1.15 [1.07; 1.23]	-0.03 [-0.11; 0.05]	32.8 [22.9; 45.4]	28.6 [20.0; 39.5]	1.00 [0.95; 1.06]	1.08 [1.01; 1.16]‡	0.08 [0.04; 0.16]§
Bahamas*	1.16 [1.10; 1.23]	1.17 [1.08; 1.26]	0.00 [-0.08; 0.09]	14.9 [11.8; 18.8]	12.8 [10.1; 16.1]	1.08 [1.02; 1.15]‡	1.07 [1.00; 1.16]	-0.01 [-0.08; 0.07]
Bahrain* †	1.05 [0.99; 1.10]	1.05 [0.97; 1.13]	0.00 [-0.07; 0.08]	8.4 [7.0; 9.9]	8.0 [6.7; 9.5]	1.20 [1.14; 1.27]‡	1.17 [1.08; 1.26]‡	-0.04 [-0.11; 0.04]
Bangladesh	1.15 [1.11; 1.18]	1.18 [1.12; 1.24]	0.03 [-0.03; 0.11]	35.7 [33.9; 37.8]	30.3 [28.6; 32.1]	1.02 [0.99; 1.06]	1.05 [1.00; 1.11]	0.03 [-0.03; 0.09]
Barbados	1.21 [1.14; 1.29]	1.19 [1.10; 1.28]	-0.02 [-0.10; 0.06]	18.4 [14.4; 23.3]	15.4 [12.1; 19.6]	1.04 [0.98; 1.10]	1.06 [0.98; 1.14]	0.02 [-0.05; 0.09]
Belarus	1.37 [1.33; 1.40]	1.29 [1.23; 1.35]	-0.08 [-0.15; 0.00]§	4.4 [4.0; 4.9]	3.4 [3.1; 3.8]	0.92 [0.89; 0.95]‡	0.93 [0.88; 0.98]‡	0.01 [-0.04; 0.06]
Belgium	1.33 [1.29; 1.37]	1.26 [1.20; 1.33]	-0.07 [-0.14; 0.00]	3.7 [3.4; 4.1]	3.0 [2.7; 3.3]	0.93 [0.90; 0.96]‡	0.95 [0.90; 1.00]‡	0.02 [-0.03; 0.07]
Belize	1.23 [1.14; 1.32]	1.24 [1.15; 1.34]	0.02 [-0.07; 0.11]	17.4 [14.6; 20.4]	14.0 [11.7; 16.5]	1.01 [0.93; 1.09]	1.01 [0.94; 1.09]	0.00 [-0.07; 0.08]
Benin	1.14 [1.10; 1.19]	1.17 [1.09; 1.24]	0.02 [-0.05; 0.10]	62.9 [45.3; 84.9]	53.9 [39.1; 72.5]	1.02 [0.98; 1.06]	1.03 [0.96; 1.10]	0.01 [-0.06; 0.08]
Bhutan	1.15 [1.07; 1.23]	1.22 [1.13; 1.32]	-0.07 [-0.02; 0.16]	39.1 [29.9; 51.0]	32.1 [24.5; 41.7]	1.02 [0.95; 1.09]	1.01 [0.93; 1.10]	-0.01 [-0.09; 0.07]
Bolivia (Plurinational State of)	1.18 [1.14; 1.23]	1.24 [1.16; 1.32]	0.06 [-0.02; 0.14]	36.2 [28.4; 45.7]	29.3 [23.0; 36.9]	1.00 [0.96; 1.04]	1.00 [0.95; 1.07]	0.00 [-0.06; 0.08]
Bosnia and Herzegovina	1.25 [1.20; 1.29]	1.23 [1.16; 1.30]	-0.02 [-0.09; 0.05]	6.4 [5.8; 6.9]	5.2 [4.7; 5.7]	1.01 [0.97; 1.05]	0.98 [0.93; 1.04]	-0.03 [-0.08; 0.03]
Botswana	1.24 [1.15; 1.33]	1.22 [1.13; 1.33]	-0.01 [-0.10; 0.07]	44.9 [19.6; 75.3]	36.7 [16.1; 61.4]	0.99 [0.92; 1.07]	1.00 [0.91; 1.10]	0.01 [-0.07; 0.09]
Brazil	1.24 [1.16; 1.33]	1.28 [1.18; 1.40]	0.04 [-0.05; 0.14]	14.5 [13.2; 15.8]	11.2 [10.2; 12.4]	0.97 [0.91; 1.04]	0.98 [0.90; 1.06]	0.00 [-0.06; 0.07]
Brunei	1.23 [1.14; 1.32]	1.21 [1.12; 1.30]	-0.02 [-0.11; 0.07]	7.3 [6.4; 8.5]	6.1 [5.3; 7.1]	1.01 [0.94; 1.09]	1.01 [0.94; 1.09]	0.00 [-0.07; 0.07]
Bulgaria	1.29 [1.25; 1.32]	1.34 [1.18; 1.29]	-0.05 [-0.11; 0.01]	11.6 [10.1; 12.2]	9.4 [8.9; 9.9]	0.98 [0.95; 1.01]	1.01 [0.96; 1.05]	0.03 [-0.02; 0.08]
Burkina Faso	1.17 [1.12; 1.22]	1.18 [1.11; 1.26]	0.02 [-0.06; 0.09]	71.1 [63.8; 79.5]	60.1 [53.9; 67.6]	1.00 [0.96; 1.05]	1.01 [0.95; 1.07]	0.01 [-0.06; 0.07]
Burundi	1.24 [1.16; 1.32]	1.24 [1.15; 1.34]	0.00 [-0.08; 0.09]	73.9 [49.8; 102.6]	59.7 [40.1; 83.2]	0.94 [0.88; 1.00]	0.96 [0.89; 1.04]	0.02 [-0.05; 0.09]
Cambodia	1.22 [1.16; 1.27]	1.28 [1.20; 1.36]	0.06 [-0.02; 0.15]	37.9 [22.7; 63.7]	29.7 [17.8; 50.0]	0.97 [0.92; 1.01]	0.97 [0.90; 1.04]	0.00 [-0.07; 0.07]
Cameroon	1.21 [1.15; 1.27]	1.21 [1.13; 1.30]	0.00 [-0.08; 0.09]	66.8 [46.1; 100.8]	55.0 [38.2; 82.8]	0.97 [0.93; 1.02]	0.99 [0.92; 1.06]	0.01 [-0.06; 0.08]
Canada	1.25 [1.22; 1.28]	1.17 [1.12; 1.22]	-0.08 [-0.14; -0.02]§	5.0 [4.5; 5.6]	4.3 [3.8; 4.8]	0.98 [0.95; 1.01]	1.03 [0.98; 1.07]	0.04 [0.00; 0.10]
Cape Verde	1.21 [1.11; 1.33]	1.26 [1.15; 1.39]	0.05 [-0.04; 0.14]	21.0 [18.1; 24.3]	16.6 [14.3; 19.4]	1.00 [0.91; 1.10]	1.00 [0.91; 1.10]	0.00 [-0.07; 0.08]
Central African Republic	1.16 [1.10; 1.22]	1.17 [1.09; 1.26]	0.01 [-0.07; 0.09]	97.8 [74.5; 127.0]	83.4 [63.9; 108.7]	1.00 [0.95; 1.06]	1.00 [0.93; 1.08]	0.00 [-0.07; 0.07]
Chad	1.16 [1.10; 1.22]	1.18 [1.10; 1.26]	0.02 [-0.06; 0.10]	96.7 [77.1; 119.3]	81.8 [67.1; 101.5]	1.01 [0.95; 1.06]	1.01 [0.93; 1.07]	-0.01 [-0.08; 0.06]
Chile	1.22 [1.19; 1.24]	1.21 [1.16; 1.27]	-0.01 [-0.06; 0.05]	8.6 [6.6; 10.7]	7.1 [5.7; 8.8]	1.03 [1.01; 1.06]‡	1.01 [0.97; 1.06]	-0.02 [-0.07; 0.03]
China*	1.11 [1.03; 1.19]	1.15 [1.06; 1.23]	0.04 [0.04; 0.12]	12.9 [11.2; 15.1]	11.2 [9.7; 13.1]	1.10 [1.02; 1.19]‡	1.09 [1.01; 1.17]‡	-0.01 [-0.09; 0.06]
Colombia	1.28 [1.21; 1.35]	1.28 [1.19; 1.37]	0.00 [-0.09; 0.09]	16.9 [12.9; 22.4]	13.2 [10.0; 17.5]	0.98 [0.92; 1.03]	0.98 [0.92; 1.05]	0.00 [-0.06; 0.07]
Comoros	1.17 [1.08; 1.26]	1.19 [1.09; 1.30]	0.02 [-0.06; 0.11]	62.7 [39.7; 104.0]	52.6 [33.0; 87.6]	1.00 [0.93; 1.09]	1.00 [0.92; 1.10]	0.00 [-0.08; 0.08]
Congo	1.20 [1.11; 1.28]	1.19 [1.10; 1.29]	-0.01 [-0.09; 0.08]	67.6 [46.2; 95.6]	56.7 [38.9; 80.2]	0.99 [0.93; 1.07]	1.00 [0.92; 1.09]	0.01 [-0.07; 0.09]
Democratic Republic of the Congo	1.14 [1.07; 1.21]	1.17 [1.09; 1.25]	0.03 [-0.05; 0.12]	107.6 [87.4; 132.4]	92.0 [74.4; 113.1]	1.02 [0.96; 1.08]	1.00 [0.93; 1.07]	-0.02 [-0.10; 0.05]
Cook Islands	1.26 [1.16; 1.37]	1.24 [1.14; 1.35]	-0.03 [-0.12; 0.07]	10.0 [7.5; 13.1]	8.1 [6.0; 10.7]	1.00 [0.92; 1.08]	1.00 [0.92; 1.09]	0.00 [-0.07; 0.08]
Costa Rica	1.27 [1.23; 1.31]	1.22 [1.17; 1.28]	-0.04 [-0.11; 0.02]	9.5 [8.0; 11.1]	7.7 [6.5; 9.0]	0.99 [0.96; 1.02]	1.01 [0.96; 1.06]	0.02 [-0.04; 0.07]
Cote d'Ivoire	1.20 [1.14; 1.26]	1.21 [1.12; 1.30]	0.01 [-0.08; 0.09]	83.0 [67.0; 102.2]	68.8 [55.4; 84.8]	0.97 [0.92; 1.02]	0.98 [0.91; 1.06]	0.01 [-0.06; 0.08]
Croatia	1.29 [1.24; 1.34]	1.34 [1.17; 1.24]	-0.12 [-0.19; -0.04]§	4.3 [4.0; 4.7]	3.7 [3.4; 4.0]	0.97 [0.93; 1.00]	1.02 [0.96; 1.08]	0.05 [-0.01; 0.11]
Cuba	1.33 [1.30; 1.36]	1.24 [1.18; 1.31]	-0.09 [-0.16; -0.02]§	4.7 [4.0; 5.5]	3.8 [3.3; 4.4]	0.94 [0.91; 0.96]‡	0.96 [0.92; 1.01]	0.03 [-0.03; 0.08]
Cyprus	1.23 [1.16; 1.31]	1.28 [1.10; 1.28]	-0.05 [-0.13; 0.04]	2.8 [2.2; 3.4]	2.3 [1.9; 2.9]	1.01 [0.95; 1.07]	1.01 [0.94; 1.09]	0.00 [-0.07; 0.07]
Czech Republic	1.33 [1.29; 1.36]	1.26 [1.20; 1.33]	-0.06 [-0.13; 0.01]	3.5 [3.2; 3.7]	2.7 [2.5; 2.9]	0.94 [0.92; 0.97]‡	0.95 [0.90; 1.00]‡	0.00 [-0.05; 0.05]
Denmark	1.29 [1.25; 1.34]	1.21 [1.15; 1.28]	-0.08 [-0.16; 0.01]§	3.3 [3.0; 3.7]	2.7 [2.5; 3.0]	0.95 [0.91; 0.99]‡	0.99 [0.93; 1.04]	0.04 [-0.02; 0.10]
Djibouti	1.15 [1.06; 1.25]	1.17 [1.07; 1.27]	0.01 [-0.07; 0.10]	70.5 [44.9; 106.8]	60.5 [53.8; 91.5]	1.02 [0.94; 1.11]	1.03 [0.94; 1.12]	0.00 [-0.07; 0.08]
Dominica	1.18 [1.09; 1.27]	1.18 [1.08; 1.29]	0.00 [-0.08; 0.09]	12.4 [9.9; 15.7]	10.5 [8.4; 13.3]	1.06 [0.99; 1.15]	1.05 [0.97; 1.15]	-0.01 [-0.08; 0.06]
Dominican Republic	1.19 [1.13; 1.25]	1.23 [1.14; 1.32]	0.04 [-0.04; 0.13]	25.0 [18.4; 34.2]	20.4 [15.			

Table 5 – continued from previous page

	Sex ratio IMR			Sex-specific IMR in 2012 (per 1,000)		Estimated/Expected female IMR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
Grenada	1.18 [1.06; 1.29]	1.18 [1.05; 1.29]	0.00 [-0.09; 0.08]	12.3 [10.0; 15.2]	10.5 [8.5; 13.1]	1.06 [0.98; 1.19]	1.06 [0.97; 1.18]	-0.01 [-0.08; 0.07]
Guatemala	1.20 [1.13; 1.27]	1.25 [1.16; 1.35]	0.05 [-0.03; 0.14]	29.4 [21.8; 39.4]	23.5 [17.3; 31.6]	1.00 [0.94; 1.06]	1.00 [0.93; 1.08]	0.00 [-0.07; 0.07]
Guinea	1.14 [1.08; 1.19]	1.19 [1.11; 1.27]	0.05 [-0.03; 0.13]	70.5 [58.3; 83.6]	59.5 [49.1; 70.7]	1.02 [0.97; 1.07]	1.00 [0.94; 1.08]	-0.01 [-0.08; 0.06]
Guinea-Bissau	1.21 [1.14; 1.30]	1.23 [1.14; 1.33]	0.02 [-0.07; 0.10]	88.7 [68.3; 114.2]	72.4 [55.4; 92.8]	0.96 [0.89; 1.02]	0.96 [0.89; 1.03]	0.00 [-0.07; 0.07]
Guyana*	1.31 [1.22; 1.41]	1.31 [1.21; 1.43]	0.00 [-0.09; 0.10]	32.7 [23.6; 45.6]	25.0 [17.9; 34.9]	0.92 [0.86; 0.99]	0.95 [0.87; 1.03]	0.02 [-0.05; 0.09]
Haiti	1.19 [1.13; 1.25]	1.22 [1.14; 1.30]	0.03 [-0.05; 0.12]	61.8 [54.6; 70.9]	50.8 [44.8; 58.2]	0.98 [0.94; 1.04]	0.98 [0.92; 1.05]	0.00 [-0.07; 0.07]
Honduras	1.23 [1.16; 1.32]	1.28 [1.18; 1.38]	0.04 [-0.04; 0.14]	21.7 [14.8; 25.6]	17.0 [14.3; 20.1]	0.98 [0.92; 1.05]	0.98 [0.91; 1.06]	0.00 [-0.07; 0.07]
Hungary	1.25 [1.22; 1.28]	1.17 [1.11; 1.22]	-0.09 [-0.15; -0.02] <sup>§</sup>	5.7 [5.2; 6.3]	4.9 [4.4; 5.4]	1.01 [0.98; 1.04]	1.03 [0.98; 1.08]	0.02 [-0.03; 0.08]
Iceland	1.20 [1.12; 1.30]	1.20 [1.11; 1.31]	0.00 [-0.09; 0.08]	1.9 [1.5; 2.5]	1.6 [1.2; 2.1]	1.00 [0.93; 1.07]	0.99 [0.92; 1.08]	0.00 [-0.07; 0.07]
India* †	1.05 [1.02; 1.08]	0.98 [0.95; 1.01]	-0.07 [-0.11; -0.03] <sup>§</sup>	43.4 [39.8; 47.5]	44.3 [40.6; 48.5]	1.12 [1.09; 1.16] <sup>‡</sup>	1.25 [1.21; 1.29] <sup>‡</sup>	0.13 [0.07; 0.18] <sup>§</sup>
Indonesia	1.24 [1.19; 1.29]	1.29 [1.20; 1.37]	0.05 [-0.03; 0.14]	28.9 [25.3; 32.9]	22.5 [19.6; 25.7]	0.97 [0.93; 1.01]	0.97 [0.91; 1.04]	0.01 [-0.06; 0.08]
Iran (Islamic Republic of)* †	1.08 [1.02; 1.14]	1.13 [1.05; 1.21]	0.05 [-0.03; 0.13]	16.0 [13.5; 18.7]	14.2 [12.0; 16.6]	1.14 [1.07; 1.20] <sup>‡</sup>	1.11 [1.04; 1.20] <sup>‡</sup>	-0.02 [-0.10; 0.06]
Iraq	1.19 [1.12; 1.26]	1.22 [1.14; 1.30]	0.03 [-0.05; 0.11]	31.1 [26.1; 36.7]	25.5 [21.3; 30.1]	1.03 [0.97; 1.09]	1.03 [0.96; 1.10]	0.00 [-0.07; 0.07]
Ireland	1.24 [1.20; 1.29]	1.20 [1.14; 1.27]	-0.04 [-0.11; 0.04]	3.7 [3.3; 4.1]	3.0 [2.7; 3.4]	0.99 [0.95; 1.03]	0.99 [0.94; 1.05]	0.00 [-0.05; 0.06]
Israel	1.14 [1.11; 1.18]	1.15 [1.09; 1.20]	0.00 [-0.06; 0.06]	3.5 [3.2; 3.9]	3.1 [2.8; 3.4]	1.08 [1.05; 1.12] <sup>‡</sup>	1.04 [0.99; 1.09]	-0.04 [-0.09; 0.02]
Italy	1.23 [1.20; 1.25]	1.18 [1.13; 1.23]	-0.05 [-0.10; 0.01]	3.5 [3.2; 3.8]	2.9 [2.7; 3.2]	1.00 [0.98; 1.03]	1.01 [0.97; 1.06]	0.01 [-0.03; 0.06]
Jamaica	1.29 [1.19; 1.41]	1.29 [1.19; 1.41]	0.00 [-0.09; 0.09]	16.2 [11.4; 23.4]	12.6 [8.8; 18.2]	0.97 [0.89; 1.06]	0.97 [0.89; 1.06]	0.00 [-0.07; 0.07]
Japan	1.17 [1.15; 1.19]	1.13 [1.09; 1.16]	-0.05 [-0.09; 0.00] <sup>§</sup>	2.3 [2.2; 2.5]	2.1 [2.0; 2.2]	1.02 [1.00; 1.05]	1.06 [1.02; 1.10] <sup>‡</sup>	0.04 [0.00; 0.08]
Jordan* †	1.10 [1.03; 1.17]	1.12 [1.02; 1.22]	0.02 [-0.06; 0.11]	17.3 [14.4; 20.6]	15.4 [12.9; 18.4]	1.14 [1.07; 1.22] <sup>‡</sup>	1.12 [1.03; 1.23] <sup>‡</sup>	-0.02 [-0.10; 0.07]
Kazakhstan* †	1.32 [1.23; 1.42]	1.37 [1.27; 1.50]	0.06 [-0.04; 0.15]	19.3 [18.2; 20.6]	14.1 [13.0; 15.1]	0.92 [0.85; 0.99] <sup>‡</sup>	0.92 [0.84; 0.99] <sup>‡</sup>	0.00 [-0.07; 0.06]
Kenya	1.16 [1.11; 1.21]	1.19 [1.11; 1.27]	0.04 [-0.04; 0.12]	52.9 [38.6; 72.1]	44.3 [32.4; 60.9]	1.03 [0.99; 1.08]	1.02 [0.95; 1.09]	-0.02 [-0.09; 0.06]
Kiribati	1.19 [1.08; 1.31]	1.21 [1.10; 1.34]	0.02 [-0.06; 0.11]	50.6 [37.5; 68.1]	41.7 [30.8; 56.0]	1.00 [0.90; 1.10]	1.00 [0.90; 1.11]	0.00 [-0.08; 0.08]
Democratic People's Republic of Korea	1.24 [1.12; 1.37]	1.26 [1.14; 1.39]	0.02 [-0.07; 0.11]	25.2 [19.5; 32.4]	20.1 [15.5; 25.8]	1.00 [0.90; 1.11]	1.00 [0.90; 1.11]	0.00 [-0.07; 0.07]
Republic of Korea	1.05 [1.02; 1.07]	1.16 [1.12; 1.21]	0.11 [-0.06; 0.17] <sup>§</sup>	3.5 [3.3; 3.7]	3.0 [2.9; 3.2]	1.16 [1.12; 1.19] <sup>‡</sup>	1.03 [0.99; 1.07]	-0.13 [-0.18; -0.08] <sup>§</sup>
Kuwait	1.18 [1.14; 1.22]	1.17 [1.12; 1.23]	-0.01 [-0.07; 0.06]	10.2 [9.4; 11.0]	8.7 [8.0; 9.4]	1.06 [1.03; 1.10] <sup>‡</sup>	1.06 [1.01; 1.11] <sup>‡</sup>	-0.01 [-0.06; 0.05]
Kyrgyzstan	1.22 [1.13; 1.33]	1.28 [1.18; 1.40]	0.06 [-0.03; 0.15]	26.4 [22.3; 29.5]	20.6 [17.4; 23.1]	0.98 [0.90; 1.06]	0.98 [0.90; 1.07]	0.00 [-0.07; 0.07]
Lao People's Democratic Republic	1.16 [1.06; 1.27]	1.20 [1.09; 1.32]	0.04 [-0.05; 0.13]	58.7 [49.2; 69.4]	48.9 [41.0; 57.9]	1.00 [0.91; 1.10]	1.00 [0.91; 1.10]	0.00 [-0.08; 0.08]
Latvia	1.28 [1.24; 1.33]	1.18 [1.11; 1.25]	-0.10 [-0.18; -0.03] <sup>§</sup>	8.2 [7.2; 9.4]	6.9 [6.1; 8.0]	0.98 [0.94; 1.02]	1.04 [0.98; 1.10]	0.06 [-0.01; 0.12]
Lebanon*	1.09 [0.99; 1.18]	1.09 [0.97; 1.19]	0.00 [-0.08; 0.08]	8.3 [5.1; 13.0]	7.6 [4.7; 12.1]	1.15 [1.06; 1.27] <sup>‡</sup>	1.13 [1.02; 1.27] <sup>‡</sup>	-0.02 [-0.11; 0.06]
Lesotho	1.19 [1.13; 1.26]	1.20 [1.12; 1.29]	0.00 [-0.08; 0.09]	80.8 [63.7; 105.2]	67.3 [52.8; 87.9]	0.99 [0.94; 1.06]	0.99 [0.92; 1.06]	0.00 [-0.08; 0.06]
Liberia	1.15 [1.09; 1.21]	1.20 [1.12; 1.28]	0.04 [-0.04; 0.13]	60.8 [47.0; 78.5]	50.8 [39.3; 65.5]	1.00 [0.95; 1.05]	1.00 [0.93; 1.08]	0.00 [-0.07; 0.08]
Libya	1.22 [1.13; 1.32]	1.26 [1.16; 1.37]	0.04 [-0.05; 0.12]	14.6 [12.0; 17.8]	11.6 [9.5; 14.2]	1.01 [0.93; 1.09]	1.00 [0.92; 1.08]	-0.01 [-0.09; 0.06]
Lithuania	1.26 [1.22; 1.30]	1.19 [1.12; 1.26]	-0.07 [-0.15; 0.00]	4.8 [4.3; 5.3]	4.0 [3.6; 4.5]	1.00 [0.96; 1.03]	1.01 [0.95; 1.07]	0.01 [-0.05; 0.07]
Luxembourg	1.23 [1.14; 1.32]	1.19 [1.10; 1.30]	-0.03 [-0.12; 0.06]	1.9 [1.5; 2.4]	1.6 [1.2; 2.0]	1.00 [0.93; 1.07]	1.00 [0.92; 1.08]	0.00 [-0.07; 0.07]
Macedonia*	1.11 [1.08; 1.15]	1.14 [1.08; 1.21]	0.03 [-0.04; 0.10]	6.9 [5.7; 8.0]	6.0 [5.0; 7.0]	1.12 [1.08; 1.16] <sup>‡</sup>	1.06 [1.00; 1.12] <sup>‡</sup>	-0.06 [-0.12; 0.01]
Madagascar	1.14 [1.09; 1.19]	1.20 [1.12; 1.28]	0.06 [-0.03; 0.14]	44.4 [33.3; 59.0]	37.1 [27.7; 49.4]	1.03 [0.98; 1.07]	1.02 [0.95; 1.10]	0.00 [-0.08; 0.07]
Malawi*	1.11 [1.07; 1.15]	1.20 [1.13; 1.27]	0.09 [0.01; 0.16] <sup>§</sup>	49.9 [41.3; 62.1]	41.8 [34.4; 52.0]	1.04 [1.00; 1.08] <sup>‡</sup>	1.02 [0.95; 1.08]	-0.02 [-0.09; 0.05]
Malaysia	1.26 [1.13; 1.39]	1.22 [1.10; 1.35]	-0.03 [-0.13; 0.06]	7.9 [7.0; 9.0]	6.5 [5.7; 7.4]	1.00 [0.91; 1.11]	1.00 [0.91; 1.11]	0.00 [-0.07; 0.08]
Maldives	1.18 [1.10; 1.27]	1.24 [1.14; 1.33]	0.05 [-0.04; 0.14]	9.9 [8.8; 11.3]	8.0 [7.1; 9.1]	1.00 [0.93; 1.08]	1.00 [0.93; 1.08]	0.00 [-0.07; 0.07]
Mali	1.16 [1.12; 1.20]	1.17 [1.10; 1.25]	0.01 [-0.07; 0.09]	85.7 [70.4; 106.7]	73.2 [60.0; 90.8]	0.99 [0.96; 1.03]	1.01 [0.94; 1.07]	0.01 [-0.05; 0.08]
Malta	1.22 [1.15; 1.22]	1.17 [1.10; 1.28]	-0.03 [-0.12; 0.05]	6.3 [5.2; 7.5]	5.3 [4.4; 6.4]	1.02 [0.95; 1.08]	1.02 [0.94; 1.09]	0.00 [-0.07; 0.07]
Marshall Islands	1.27 [1.15; 1.42]	1.30 [1.19; 1.45]	0.03 [-0.06; 0.12]	34.9 [27.7; 43.0]	26.7 [21.2; 33.0]	0.97 [0.86; 1.07]	0.96 [0.85; 1.05]	-0.01 [-0.08; 0.06]
Mauritania*	1.25 [1.18; 1.33]	1.27 [1.18; 1.37]	0.01 [-0.07; 0.10]	72.3 [61.4; 88.6]	57.0 [48.2; 70.5]	0.94 [0.88; 1.00]	0.94 [0.87; 1.01]	0.00 [-0.07; 0.07]
Mauritius	1.32 [1.27; 1.37]	1.28 [1.21; 1.35]	-0.04 [-0.12; 0.04]	14.5 [12.0; 17.0]	11.4 [9.7; 13.3]	0.95 [0.92; 0.99] <sup>‡</sup>	0.98 [0.93; 1.04]	0.03 [-0.03; 0.09]
Mexico	1.21 [1.15; 1.28]	1.23 [1.19; 1.26]	0.01 [-0.06; 0.09]	15.3 [14.8; 15.8]	12.5 [11.2; 12.9]	1.02 [0.96; 1.08]	1.02 [0.99; 1.05]	0.01 [-0.06; 0.07]
Republic of Moldova	1.27 [1.16; 1.39]	1.27 [1.16; 1.39]	0.00 [-0.09; 0.09]	16.9 [12.2; 24.1]	13.3 [9.6; 19.0]	0.99 [0.90; 1.08]	0.99 [0.90; 1.08]	0.00 [-0.07; 0.07]
Monaco	1.21 [1.09; 1.34]	1.19 [1.08; 1.32]	-0.02 [-0.10; 0.07]	3.3 [2.9; 3.8]	2.8 [2.4; 3.2]	1.01 [0.91; 1.11]	1.00 [0.91; 1.10]	0.00 [-0.07; 0.07]
Mongolia* †	1.46 [1.29; 1.63]	1.51 [1.32; 1.71]	0.05 [-0.05; 0.17]	27.6 [19.5; 37.3]	28.1 [12.2; 24.7]	0.81 [0.72; 0.92] <sup>‡</sup>	0.83 [0.73; 0.95] <sup>‡</sup>	0.02 [-0.04; 0.08]
Montenegro*	1.14 [1.07; 1.21]	1.13 [1.05; 1.22]	-0.01 [-0.09; 0.07]	5.8 [4.9; 6.9]	5.2 [4.4; 6.1]	1.10 [1.04; 1.17] <sup>‡</sup>	1.06 [0.99; 1.15]	-0.04 [-0.11; 0.04]
Morocco	1.19 [1.13; 1.24]	1.26 [1.18; 1.35]	0.07 [-0.01; 0.16]	29.7 [24.9; 34.8]	23.6 [19.7; 27.7]	1.00 [0.96; 1.05]	0.99 [0.92; 1.06]	0.01 [-0.08; 0.06]
Mozambique*	1.10 [1.05; 1.15]	1.14 [1.08; 1.21]	0.04 [-0.03; 0.12]	67.2 [58.8; 77.5]	58.8 [51.4; 68.0]	1.05 [1.00; 1.09] <sup>‡</sup>	1.04 [0.98; 1.11]	0.00 [-0.07; 0.07]
Myanmar	1.23 [1.14; 1.33]	1.26 [1.16; 1.38]	0.03 [-0.06; 0.12]	45.7 [35.2; 57.9]	36.2 [27.9; 46.0]	0.96 [0.89; 1.04]	0.97 [0.88; 1.06]	0.01 [-0.06; 0.08]
Namibia	1.20 [1.13; 1.28]	1.25 [1.16; 1.36]	0.05 [-0.03; 0.14]	31.4 [23.1; 42.0]	25.1 [18.3; 33.6]	1.00 [0.94; 1.08]	0.99 [0.92; 1.08]	-0.01 [-0.09; 0.06]
Nauru	1.22 [1.10; 1.34]	1.25 [1.13; 1.38]	0.03 [-0.06; 0.12]	33.5 [24.3; 46.3]	26.8 [18.8; 37.2]	1.00 [0.90; 1.11]	1.00 [0.90; 1.10]	0.00 [-0.08; 0.08]
Nepal	1.12 [1.07; 1.17]	1.18 [1.10; 1.26]	0.06 [-0.02; 0.14]	36.2 [29.6; 44.3]	30.8 [25.1; 37.6]	1.04 [1.00; 1.09]	1.05 [0.98; 1.13]	0.01 [-0.07; 0.08]
Netherlands	1.30 [1.27; 1.34]	1.22 [1.17; 1.28]	-0.08 [-0.15; -0.02] <sup>§</sup>	3.7 [3.6; 3.9]	3.1 [2.9; 3.2]	0.94 [0.91; 0.97] <sup>‡</sup>	0.98 [0.93; 1.02]	0.04 [-0.01; 0.09]
New Zealand	1.27 [1.23; 1.32]	1.24 [1.17; 1.31]	-0.04 [-0.11; 0.04]	5.2 [4.7; 5.8]	4.2 [3.8; 4.7]	0.97 [0.94; 1.01]	1.00 [0.96; 1.09]	0.00 [-0.06; 0.06]
Nicaragua	1.21 [1.15; 1.28]	1.26 [1.17; 1.35]	0.05 [-0.04; 0.14]	22.9 [16.0; 33.0]	18.2 [12.6; 26.2]	0.99 [0.94; 1.05]	1.00 [0.93; 1.07]	0.00 [-0.07; 0.08]
Niger	1.12 [1.08; 1.17]	1.16 [1.09; 1.23]	0.04 [-0.04; 0.11]	67.4 [53.9; 76.9]	58.1 [51.1; 66.6]	1.03 [0.99; 1.07]	1.03 [0.97; 1.10]	-0.01 [-0.07; 0.07]
Nigeria	1.17 [1.12; 1.22]	1.18 [1.12; 1.25]	0.01 [-0.06; 0.09]	84.1 [70.0; 100.6]	71.9 [59.0; 84.9]	0.99 [0.95; 1.03]	1.00 [0.94; 1.06]	0.01 [-0.05; 0.08]
Niue	1.25 [1.13; 1.38]	1.26 [1.14; 1.39]	0.01 [-0.08; 0.10]	23.6 [12.8; 40.6]	18.8 [10.2; 32.2]	1.00 [0.90; 1.10]	1.00 [0.90; 1.10]	0.00 [-0.08; 0.07]
Norway	1.28 [1.23; 1.33]	1.26 [1.19; 1.33]	-0.02 [-0.10; 0.06]	2.5 [2.2; 2.8]	2.0 [1.7; 2.2]	0.96 [0.92; 1.00] <sup>‡</sup>	0.96 [0.92; 1.01]	-0.01 [-0.07; 0.05]
Oman	1.23 [1.14; 1.34]	1.23 [1.13; 1.35]	0.0					

Table 5 – continued from previous page

	Sex ratio IMR			Sex-specific IMR in 2012 (per 1,000)		Estimated/Expected female IMR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
Saint Vincent and the Grenadines	1.19 [1.11; 1.27]	1.20 [1.11; 1.29]	0.01 [-0.07; 0.10]	22.9 [18.6; 28.2]	19.1 [15.5; 23.6]	1.06 [0.99; 1.14]	1.05 [0.97; 1.14]	-0.01 [-0.09; 0.07]
Sudan	1.23 [1.16; 1.30]	1.25 [1.17; 1.35]	0.03 [-0.06; 0.12]	54.7 [45.9; 64.3]	43.6 [36.4; 51.4]	0.96 [0.91; 1.02]	0.96 [0.89; 1.03]	0.00 [-0.07; 0.07]
Suriname	1.25 [1.15; 1.36]	1.29 [1.18; 1.41]	0.04 [-0.05; 0.13]	20.7 [12.0; 35.8]	16.1 [9.3; 27.8]	0.98 [0.90; 1.06]	0.98 [0.89; 1.06]	0.00 [-0.08; 0.07]
Swaziland	1.21 [1.13; 1.30]	1.20 [1.12; 1.29]	-0.01 [-0.09; 0.07]	60.6 [45.2; 80.6]	50.5 [37.3; 67.4]	0.99 [0.92; 1.06]	1.00 [0.93; 1.08]	0.01 [-0.07; 0.08]
Sweden	1.25 [1.20; 1.29]	1.19 [1.13; 1.26]	-0.05 [-0.12; 0.02]	2.5 [2.4; 2.7]	2.1 [2.0; 2.3]	0.97 [0.94; 1.01]	1.00 [0.95; 1.06]	0.03 [-0.03; 0.09]
Switzerland	1.27 [1.22; 1.31]	1.19 [1.13; 1.25]	-0.08 [-0.15; 0.00]§	4.0 [3.7; 4.3]	3.4 [3.1; 3.7]	0.96 [0.93; 1.00]	1.00 [0.95; 1.06]	0.04 [-0.02; 0.10]
Syria	1.21 [1.14; 1.29]	1.24 [1.15; 1.33]	0.03 [-0.06; 0.11]	13.6 [11.0; 17.0]	11.0 [8.9; 13.7]	1.03 [0.97; 1.09]	1.01 [0.94; 1.09]	-0.02 [-0.09; 0.06]
Tajikistan	1.23 [1.15; 1.32]	1.25 [1.16; 1.36]	0.02 [-0.06; 0.11]	54.4 [28.8; 98.1]	43.4 [23.0; 79.1]	0.96 [0.89; 1.03]	0.97 [0.88; 1.05]	0.01 [-0.07; 0.09]
Tanzania*	1.11 [1.06; 1.15]	1.17 [1.09; 1.25]	0.06 [-0.02; 0.14]	40.5 [32.7; 50.7]	34.8 [28.0; 43.5]	1.06 [1.01; 1.11]‡	1.05 [0.99; 1.13]	0.00 [-0.07; 0.07]
Thailand*	1.34 [1.26; 1.44]	1.32 [1.22; 1.44]	-0.02 [-0.12; 0.08]	12.9 [8.9; 18.7]	9.7 [6.7; 14.0]	0.92 [0.86; 0.99]‡	0.94 [0.87; 1.02]	0.02 [-0.05; 0.09]
Timor Leste	1.15 [1.07; 1.23]	1.20 [1.12; 1.30]	0.06 [-0.03; 0.14]	52.2 [39.1; 67.1]	43.3 [32.3; 55.5]	1.01 [0.94; 1.08]	1.01 [0.93; 1.09]	0.00 [-0.08; 0.07]
Togo	1.20 [1.13; 1.27]	1.23 [1.14; 1.32]	0.03 [-0.05; 0.11]	68.2 [54.1; 86.1]	55.5 [44.1; 70.4]	0.98 [0.92; 1.04]	0.97 [0.90; 1.05]	-0.01 [-0.08; 0.06]
Tonga	1.26 [1.14; 1.39]	1.25 [1.13; 1.38]	-0.01 [-0.10; 0.08]	12.2 [7.1; 20.9]	9.8 [5.6; 16.7]	1.00 [0.91; 1.11]	1.00 [0.90; 1.10]	0.00 [-0.08; 0.07]
Trinidad and Tobago	1.22 [1.13; 1.32]	1.24 [1.14; 1.35]	0.02 [-0.07; 0.11]	20.4 [11.7; 35.3]	16.4 [9.5; 28.4]	1.02 [0.94; 1.10]	1.01 [0.93; 1.10]	-0.01 [-0.08; 0.06]
Tunisia	1.18 [1.11; 1.26]	1.21 [1.12; 1.30]	0.03 [-0.05; 0.11]	15.1 [12.8; 17.8]	12.5 [10.5; 14.7]	1.04 [0.97; 1.11]	1.04 [0.96; 1.12]	0.00 [-0.07; 0.07]
Turkey	1.17 [1.10; 1.24]	1.23 [1.14; 1.32]	0.06 [-0.03; 0.15]	13.4 [9.0; 19.7]	11.0 [7.3; 16.1]	1.03 [0.97; 1.09]	1.02 [0.94; 1.10]	-0.01 [-0.08; 0.06]
Turkmenistan*	1.33 [1.19; 1.66]	1.35 [1.21; 1.70]	0.02 [-0.08; 0.13]	51.8 [29.4; 83.5]	37.5 [20.9; 61.0]	0.89 [0.71; 0.99]‡	0.90 [0.71; 1.01]	0.01 [-0.06; 0.08]
Tuvalu	1.22 [1.12; 1.34]	1.26 [1.16; 1.38]	0.04 [-0.05; 0.13]	27.6 [19.4; 39.2]	21.8 [15.4; 31.1]	0.99 [0.90; 1.09]	0.99 [0.90; 1.09]	0.00 [-0.08; 0.07]
Uganda	1.16 [1.11; 1.21]	1.23 [1.16; 1.31]	0.07 [-0.00; 0.16]	50.0 [42.9; 59.4]	40.6 [34.9; 48.2]	1.01 [0.96; 1.05]	0.99 [0.92; 1.05]	-0.02 [-0.09; 0.05]
Ukraine*	1.35 [1.32; 1.37]	1.28 [1.24; 1.32]	-0.07 [-0.12; -0.02]§	10.3 [9.5; 11.2]	8.1 [7.4; 8.8]	0.93 [0.92; 0.95]‡	0.97 [0.94; 1.00]	0.04 [0.00; 0.07]§
United Arab Emirates	1.28 [1.19; 1.39]	1.24 [1.14; 1.36]	-0.04 [-0.13; 0.05]	8.0 [6.9; 9.1]	6.4 [5.6; 7.3]	0.98 [0.90; 1.06]	0.99 [0.90; 1.07]	0.01 [-0.06; 0.08]
United Kingdom	1.30 [1.28; 1.33]	1.23 [1.19; 1.27]	-0.07 [-0.12; -0.02]§	4.5 [4.2; 4.7]	3.6 [3.4; 3.8]	0.94 [0.92; 0.97]‡	0.97 [0.93; 1.00]	0.03 [-0.01; 0.06]
United States of America	1.25 [1.24; 1.27]	1.21 [1.16; 1.25]	-0.05 [-0.09; 0.00]	6.6 [5.7; 7.6]	5.5 [4.8; 6.3]	0.99 [0.97; 1.00]	1.00 [0.97; 1.04]	0.02 [-0.02; 0.06]
Uruguay	1.27 [1.23; 1.30]	1.21 [1.15; 1.28]	-0.06 [-0.13; 0.02]	6.7 [4.7; 9.5]	5.6 [3.8; 7.9]	0.99 [0.96; 1.03]	1.00 [0.95; 1.06]	0.01 [-0.05; 0.07]
Uzbekistan*	1.31 [1.22; 1.43]	1.34 [1.23; 1.48]	0.03 [-0.06; 0.13]	39.2 [21.4; 63.8]	29.3 [15.9; 47.4]	0.91 [0.83; 0.98]‡	0.92 [0.83; 1.00]	0.01 [-0.06; 0.08]
Vanuatu	1.23 [1.11; 1.35]	1.24 [1.12; 1.36]	0.01 [-0.08; 0.10]	16.9 [9.2; 30.1]	13.7 [7.4; 24.4]	1.02 [0.92; 1.13]	1.01 [0.92; 1.12]	-0.01 [-0.08; 0.07]
Venezuela (Bolivarian Republic of)	1.31 [1.20; 1.44]	1.29 [1.18; 1.44]	-0.01 [-0.10; 0.08]	14.8 [13.6; 16.1]	11.4 [10.3; 12.5]	0.96 [0.87; 1.05]	0.97 [0.87; 1.06]	0.01 [-0.06; 0.08]
Vietnam	1.30 [1.23; 1.39]	1.32 [1.22; 1.43]	0.01 [-0.08; 0.11]	20.8 [19.6; 22.1]	15.8 [14.7; 16.9]	0.94 [0.88; 1.00]	0.96 [0.88; 1.03]	0.01 [-0.05; 0.08]
Yemen	1.18 [1.13; 1.23]	1.21 [1.13; 1.30]	0.03 [-0.05; 0.12]	50.6 [36.7; 68.2]	41.8 [30.3; 56.2]	1.00 [0.95; 1.04]	1.00 [0.93; 1.08]	0.00 [-0.07; 0.08]
Zambia	1.14 [1.09; 1.19]	1.18 [1.11; 1.26]	0.04 [-0.04; 0.12]	61.1 [43.8; 91.2]	51.7 [37.0; 76.8]	1.02 [0.97; 1.06]	1.01 [0.95; 1.09]	0.00 [-0.07; 0.07]
Zimbabwe	1.28 [1.21; 1.36]	1.26 [1.18; 1.36]	-0.01 [-0.10; 0.07]	62.0 [49.9; 79.6]	49.1 [39.4; 63.3]	0.94 [0.89; 1.00]	0.95 [0.88; 1.02]	0.01 [-0.06; 0.07]

\* : Sex ratio is outlying in 1990. †: Sex ratio is outlying in 2012. ‡: Ratio of estimated to expected female mortality is significantly different from one. §: Change is significantly different from zero.

Table 6: Estimates and 90% uncertainty intervals for sex ratios for CMR in 1990 and 2012, the change in sex ratios from 1990 to 2012, sex-specific CMR in 2012 (per 1,000), and ratios of estimated to expected female CMR and their change from 1990 to 2012 for the world, MDG regions, and all countries. \* : Sex ratio is outlying in 1990. †: Sex ratio is outlying in 2012. ‡: Ratio of estimated to expected female mortality is significantly different from one. §: Change is significantly different from zero.

	Sex ratio CMR			Sex-specific CMR in 2012 (per 1,000)		Estimated/Expected female CMR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
World*	0.91 [0.90; 0.93]	0.95 [0.93; 0.97]	0.04 [0.02; 0.06]§	13.3 [12.4; 14.4]	14.0 [13.0; 15.1]	1.11 [1.09; 1.13]‡	1.07 [1.05; 1.09]‡	-0.04 [-0.06; -0.01]§
Developed regions	1.25 [1.24; 1.26]	1.23 [1.21; 1.25]	-0.02 [-0.04; 0.00]	1.1 [1.1; 1.1]	0.9 [0.8; 0.9]	0.97 [0.95; 0.98]‡	0.99 [0.97; 1.01]	0.02 [0.00; 0.04]§
Northern Africa*	0.91 [0.89; 0.94]	1.13 [1.10; 1.16]	0.22 [0.18; 0.26]§	3.4 [3.1; 3.9]	3.0 [2.8; 3.4]	1.14 [1.10; 1.19]‡	1.07 [1.04; 1.10]‡	-0.07 [-0.12; -0.03]§
Sub-Saharan Africa*	1.04 [1.02; 1.06]	1.02 [1.00; 1.05]	-0.02 [-0.04; 0.01]	37.3 [33.5; 41.6]	36.4 [32.8; 40.6]	0.98 [0.96; 0.99]‡	0.98 [0.96; 1.01]	0.01 [-0.01; 0.03]
Eastern Asia	1.02 [0.86; 1.13]	1.14 [0.97; 1.27]	0.12 [0.05; 0.20]§	2.2 [1.9; 2.5]	1.9 [1.6; 2.3]	1.07 [0.96; 1.28]	1.06 [0.95; 1.24]	-0.01 [-0.10; 0.06]
Southern Asia* †	0.75 [0.73; 0.77]	0.79 [0.76; 0.82]	0.04 [0.01; 0.07]§	11.6 [10.4; 12.9]	14.7 [13.1; 16.4]	1.34 [1.30; 1.37]‡	1.38 [1.33; 1.43]‡	0.04 [-0.02; 0.10]
South-eastern Asia	1.04 [1.01; 1.07]	1.18 [1.13; 1.24]	0.15 [0.10; 0.19]§	6.4 [5.6; 7.6]	5.4 [4.7; 6.4]	0.99 [0.95; 1.02]	0.98 [0.93; 1.02]	-0.01 [-0.05; 0.03]
Western Asia	0.99 [0.95; 1.04]	1.10 [1.04; 1.17]	0.11 [0.05; 0.17]§	5.0 [4.0; 6.5]	4.5 [3.5; 6.0]	1.05 [1.00; 1.10]‡	1.03 [0.97; 1.09]	-0.02 [-0.08; 0.04]
Caucasus and Central Asia	1.11 [1.05; 1.19]	1.21 [1.13; 1.31]	0.10 [0.03; 0.16]§	5.9 [3.9; 9.6]	4.8 [3.2; 8.0]	0.95 [0.88; 1.01]	0.94 [0.85; 1.01]	-0.01 [-0.08; 0.05]
Latin America and the Caribbean	1.07 [1.03; 1.10]	1.16 [1.13; 1.19]	0.09 [0.06; 0.13]§	3.2 [3.0; 3.5]	2.8 [2.6; 3.0]	1.01 [0.97; 1.05]	1.01 [0.98; 1.03]	0.00 [-0.04; 0.03]
Oceania	1.02 [0.91; 1.14]	1.07 [0.95; 1.20]	0.05 [-0.02; 0.12]	13.5 [8.1; 23.1]	12.6 [7.6; 21.7]	1.00 [0.90; 1.13]	1.00 [0.88; 1.14]	0.00 [-0.09; 0.09]
Afghanistan	0.94 [0.87; 1.02]	0.95 [0.88; 1.03]	0.01 [-0.06; 0.08]	28.8 [23.1; 36.0]	30.3 [24.3; 37.9]	1.06 [0.98; 1.15]	1.06 [0.98; 1.15]	0.00 [-0.08; 0.08]
Albania	1.21 [1.08; 1.37]	1.24 [1.10; 1.41]	0.03 [-0.06; 0.12]	2.0 [1.3; 3.2]	1.6 [1.0; 2.6]	0.98 [0.85; 1.10]	0.98 [0.86; 1.10]	0.00 [-0.08; 0.08]
Algeria	1.15 [1.11; 1.19]	1.18 [1.11; 1.26]	0.03 [-0.05; 0.11]	3.1 [2.1; 4.7]	2.7 [1.7; 4.0]	0.99 [0.95; 1.03]	1.03 [0.97; 1.09]	0.04 [-0.03; 0.11]
Andorra	1.22 [1.07; 1.38]	1.21 [1.07; 1.38]	0.00 [-0.09; 0.09]	0.7 [0.6; 0.8]	0.6 [0.5; 0.6]	1.00 [0.88; 1.13]	1.00 [0.88; 1.13]	0.00 [-0.07; 0.07]
Angola	1.03 [0.93; 1.13]	1.01 [0.91; 1.12]	-0.01 [-0.09; 0.06]	71.4 [43.6; 113.0]	70.6 [43.0; 112.7]	0.99 [0.90; 1.09]	0.99 [0.90; 1.10]	0.00 [-0.07; 0.08]
Antigua and Barbuda	1.23 [1.09; 1.41]	1.23 [1.10; 1.41]	0.04 [-0.09; 0.09]	0.7 [0.5; 1.0]	0.6 [0.4; 0.8]	0.98 [0.86; 1.11]	0.99 [0.86; 1.11]	0.00 [-0.07; 0.07]
Argentina	1.15 [1.13; 1.18]	1.17 [1.12; 1.22]	0.02 [-0.04; 0.07]	1.7 [1.6; 1.7]	1.4 [1.3; 1.5]	1.05 [1.02; 1.08]‡	1.04 [0.99; 1.08]	-0.01 [-0.06; 0.04]
Armenia	1.15 [1.03; 1.30]	1.23 [1.09; 1.38]	0.07 [-0.01; 0.16]	1.9 [1.6; 2.5]	1.6 [1.3; 2.0]	1.00 [0.88; 1.13]	0.99 [0.88; 1.11]	-0.01 [-0.09; 0.07]
Australia	1.28 [1.24; 1.33]	1.27 [1.20; 1.35]	-0.01 [-0.09; 0.07]	0.8 [0.8; 0.9]	0.6 [0.6; 0.7]	0.95 [0.91; 0.98]‡	0.95 [0.90; 1.01]	0.01 [-0.05; 0.07]
Austria	1.25 [1.19; 1.32]	1.24 [1.16; 1.33]	-0.01 [-0.10; 0.07]	0.8 [0.7; 0.8]	0.6 [0.6; 0.7]	0.97 [0.92; 1.02]	0.98 [0.91; 1.05]	0.01 [-0.06; 0.08]
Azerbaijan*	1.21 [1.08; 1.40]	1.43 [1.26; 1.67]	0.22 [0.12; 0.33]§	5.4 [3.2; 9.0]	3.7 [2.2; 6.3]	0.85 [0.73; 0.96]‡	0.84 [0.71; 0.95]‡	-0.01 [-0.08; 0.06]
Bahamas	1.17 [1.05; 1.29]	1.18 [1.05; 1.30]	0.01 [-0.08; 0.10]	3.5 [2.6; 4.1]	2.8 [2.2; 3.5]	1.04 [0.94; 1.15]	1.03 [0.93; 1.15]	-0.01 [-0.08; 0.07]
Bahrain	1.21 [1.11; 1.32]	1.21 [1.10; 1.33]	0.00 [-0.09; 0.09]	1.5 [1.2; 1.8]	1.2 [1.0; 1.5]	1.00 [0.92; 1.09]	1.00 [0.91; 1.10]	0.00 [-0.07; 0.07]
Bangladesh*	0.85 [0.82; 0.89]	1.04 [0.98; 1.11]	0.19 [0.13; 0.26]§	8.3 [7.6; 9.1]	7.9 [7.2; 8.7]	1.17 [1.12; 1.22]‡	1.10 [1.03; 1.17]‡	-0.07 [-0.15; 0.00]
Barbados	1.22 [1.12; 1.34]	1.23 [1.12; 1.35]	0.00 [-0.09; 0.09]	1.6 [1.3; 2.1]	1.3 [1.0; 1.7]	0.99 [0.91; 1.08]	0.99 [0.90; 1.09]	0.00 [-0.07; 0.07]
Belarus	1.29 [1.24; 1.34]	1.30 [1.23; 1.38]	0.02 [-0.06; 0.10]	1.4 [1.3; 1.6]	1.1 [1.0; 1.2]	0.94 [0.91; 0.98]‡	0.93 [0.88; 0.99]‡	-0.01 [-0.07; 0.05]
Belgium	1.22 [1.16; 1.28]	1.25 [1.17; 1.33]	0.03 [-0.05; 0.11]	0.9 [0.8; 1.0]	0.7 [0.7; 0.8]	1.00 [0.95; 1.04]	0.97 [0.91; 1.04]	-0.02 [-0.09; 0.04]
Belize	1.12 [1.01; 1.25]	1.21 [1.09; 1.35]	0.09 [0.00; 0.18]§	2.9 [2.4; 3.6]	2.4 [1.9; 3.0]	1.00 [0.89; 1.13]	1.00 [0.90; 1.11]	0.00 [-0.08; 0.07]
Benin	1.01 [0.96; 1.06]	1.00 [0.93; 1.07]	-0.02 [-0.08; 0.06]	32.8 [19.1; 50.6]	32.9 [19.3; 51.0]	1.00 [0.95; 1.05]	1.01 [0.94; 1.09]	0.01 [-0.06; 0.09]
Bhutan	1.00 [0.90; 1.10]	1.13 [1.02; 1.26]	0.13 [0.05; 0.21]§	9.8 [6.2; 15.2]	8.6 [5.5; 13.5]	1.00 [0.90; 1.10]	0.99 [0.88; 1.13]	0.00 [-0.09; 0.09]
Bolivia (Plurinational State of)	0.98 [0.93; 1.04]	1.10 [1.02; 1.18]	0.12 [0.04; 0.20]§	9.3 [6.5; 13.4]	8.4 [6.0; 12.2]	1.01 [0.96; 1.07]	1.03 [0.94; 1.13]	0.01 [-0.07; 0.11]
Bosnia and Herzegovina	1.34 [1.24; 1.45]	1.33 [1.21; 1.46]	-0.01 [-0.10; 0.08]	1.0 [0.9; 1.1]	0.8 [0.7; 0.8]	0.91 [0.84; 0.98]‡	0.91 [0.83; 1.00]	0.01 [-0.06; 0.07]
Botswana	1.07 [0.95; 1.18]	1.05 [0.93; 1.17]	-0.02 [-0.09; 0.06]	13.2 [8.3; 30.8]	12.5 [3.6; 29.6]	1.04 [0.93; 1.18]	1.04 [0.90; 1.23]	0.00 [-0.12; 0.16]
Brazil	1.12 [1.02; 1.25]	1.23 [1.11; 1.38]	0.11 [0.03; 0.20]§	1.7 [1.6; 1.9]	1.4 [1.3; 1.5]	0.98 [0.88; 1.09]	0.98 [0.88; 1.09]	0.00 [-0.07; 0.08]
Brunei	1.18 [1.05; 1.31]	1.19 [1.05; 1.31]	0.01 [-0.08; 0.09]	1.4 [1.2; 1.6]	1.2 [1.0; 1.4]	1.03 [0.93; 1.15]	1.02 [0.92; 1.15]	0.00 [-0.08; 0.07]
Bulgaria	1.20 [1.15; 1.25]	1.19 [1.12; 1.26]	-0.01 [-0.08; 0.07]	1.7 [1.6; 1.8]	1.5 [1.4; 1.6]	1.01 [0.97; 1.06]	1.02 [0.96; 1.08]	0.01 [-0.06; 0.07]
Burkina Faso	1.02 [0.98; 1.07]	0.99 [0.93; 1.06]	-0.03 [-0.10; 0.04]	39.1 [26.0; 54.5]	39.4 [26.2; 54.9]	1.00 [0.95; 1.05]	1.01 [0.95; 1.08]	0.01 [-0.06; 0.08]
Burundi	0.99 [0.92; 1.07]	0.99 [0.91; 1.08]	0.00 [-0.07; 0.07]	39.8 [21.4; 63.8]	40.4 [21.7; 64.7]	1.01 [0.94; 1.09]	1.01 [0.93; 1.11]	0.00 [-0.07; 0.08]
Cambodia	0.99 [0.93; 1.05]	1.17 [1.08; 1.27]	0.18 [0.10; 0.27]§	6.4 [3.7; 15.6]	5.5 [3.1; 13.5]	1.01 [0.95; 1.08]	1.00 [0.88; 1.10]	-0.01 [-0.13; 0.08]
Cameroon	1.01 [0.96; 1.07]	1.03 [0.96; 1.11]	0.02 [-0.05; 0.09]	36.6 [20.1; 66.5]	35.5 [19.6; 64.1]	0.98 [0.93; 1.04]	0.98 [0.91; 1.05]	-0.01 [-0.08; 0.06]
Canada	1.24 [1.20; 1.28]	1.24 [1.17; 1.32]	0.00 [-0.07; 0.08]	0.7 [0.6; 0.8]	0.6 [0.5; 0.6]	0.98 [0.94; 1.02]	0.98 [0.92; 1.03]	0.00 [-0.06; 0.06]
Cape Verde	1.04 [0.91; 1.17]	1.20 [1.05; 1.34]	0.15 [0.07; 0.24]§	3.6 [3.0; 4.5]	3.1 [2.5; 3.8]	1.02 [0.90; 1.17]	1.02 [0.91; 1.16]	-0.01 [-0.09; 0.07]
Central African Republic	0.98 [0.91; 1.06]	0.98 [0.89; 1.07]	0.00 [-0.07; 0.07]	41.2 [23.7; 74.7]	42.3 [23.7; 76.3]	1.02 [0.95; 1.10]	1.02 [0.94; 1.12]	0.00 [-0.07; 0.08]
Chad	1.04 [0.99; 1.10]	1.01 [0.94; 1.09]	-0.03 [-0.10; 0.04]	66.8 [38.6; 103.6]	65.8 [38.2; 102.3]	0.98 [0.92; 1.03]	0.99 [0.92; 1.07]	0.01 [-0.05; 0.08]
Chile	1.26 [1.22; 1.30]	1.23 [1.16; 1.30]	-0.03 [-0.11; 0.05]	1.4 [1.1; 1.7]	1.1 [0.9; 1.4]	0.96 [0.93; 1.00]‡	0.99 [0.93; 1.04]	0.02 [-0.03; 0.09]
China	1.02 [0.86; 1.13]	1.14 [0.96; 1.27]	0.12 [0.05; 0.21]§	2.1 [1.8; 2.5]	1.9 [1.6; 2.2]	1.07 [0.96; 1.29]	1.06 [0.95; 1.26]	-0.01 [-0.10; 0.07]
Colombia	1.18 [1.09; 1.28]	1.21 [1.11; 1.33]	0.03 [-0.06; 0.12]	2.8 [2.1; 4.0]	2.3 [1.7; 3.3]	0.99 [0.91; 1.08]	1.00 [0.92; 1.09]	0.01 [-0.07; 0.08]
Comoros	1.03 [0.93; 1.17]	1.06 [0.95; 1.21]	0.03 [-0.05; 0.11]	21.8 [9.9; 47.8]	20.5 [9.2; 44.6]	0.97 [0.85; 1.07]	0.97 [0.85; 1.11]	0.01 [-0.07; 0.12]
Congo	1.00 [0.91; 1.10]	1.01 [0.92; 1.12]	0.01 [-0.06; 0.08]	36.3 [19.7; 59.8]	35.7 [19.4; 59.1]	1.00 [0.91; 1.09]	0.99 [0.90; 1.10]	0.00 [-0.08; 0.07]
Democratic Republic of the Congo	1.05 [0.96; 1.15]	1.04 [0.96; 1.15]	0.00 [-0.07; 0.08]	52.1 [31.8; 81.8]	49.6 [30.6; 77.8]	0.96 [0.88; 1.04]	0.96 [0.87; 1.05]	0.00 [-0.07; 0.07]
Cook Islands	1.22 [1.09; 1.39]	1.22 [1.08; 1.38]	0.00 [-0.09; 0.09]	1.7 [1.3; 2.2]	1.4 [1.0; 1.8]	0.99 [0.88; 1.12]	0.99 [0.88; 1.12]	0.00 [-0.07; 0.08]
Costa Rica	1.20 [1.15; 1.26]	1.22 [1.14; 1.30]	0.02 [-0.07; 0.10]	1.4 [1.2; 1.6]	1.1 [1.0; 1.3]	1.01 [0.96; 1.06]	1.00 [0.93; 1.07]	-0.01 [-0.08; 0.06]
Côte d'Ivoire*	1.12 [1.04; 1.21]	1.09 [1.00; 1.21]	-0.02 [-0.10; 0.06]	35.4 [25.4; 48.3]	32.5 [23.2; 44.2]	0.89 [0.83; 0.96]‡	0.92 [0.83; 1.01]	0.02 [-0.04; 0.09]
Croatia	1.31 [1.22; 1.40]	1.29 [1.19; 1.41]	-0.01 [-0.10; 0.08]	0.7 [0.7; 0.8]	0.6 [0.5; 0.6]	0.93 [0.86; 0.99]‡	0.94 [0.86; 1.02]	0.01 [-0.06; 0.08]
Cuba	1.20 [1.16; 1.25]	1.21 [1.14; 1.28]	0.01 [-0.07; 0.09]	1.4 [1.2; 1.6]	1.1 [1.0; 1.3]	1.01 [0.97; 1.05]	1.00 [0.94; 1.07]	-0.01 [-0.07; 0.06]
Cyprus	1.20 [1.06; 1.34]	1.20 [1.06; 1.34]	0.00 [-0.09; 0.09]	0.7 [0.6; 0.9]	0.6 [0.5; 0.8]	1.01 [0.90; 1.15]	1.01 [0.90; 1.15]	0.00 [-0.07; 0.07]
Czech Republic	1.25 [1.19; 1.32]	1.24 [1.16; 1.33]	-0.01 [-0.09; 0.07]	0.7 [0.7; 0.8]	0.6 [0.6; 0.6]	0.97 [0.92; 1.02]	0.98 [0.91; 1.05]	0.01 [-0.06; 0.08]
Denmark	1.24 [1.17; 1.32]	1.24 [1.15; 1.33]	-0.01 [-0.09; 0.08]	0.7 [0.7; 0.8]	0.6 [0.5; 0.7]	0.98 [0.92; 1.03]	0.98 [0.91; 1.06]	0.01 [-0.06; 0.08]
Djibouti	1.03 [0.92; 1.18]	1.08 [0.97; 1.23]	0.05 [-0.03; 0.13]	16.9 [7.7; 33.9]	15.6 [7.1; 31.4]	0.98 [0.86; 1.09]	0.98 [0.84; 1.13]	0.00 [-0.09; 0.12]
Dominica	1.22 [1.11; 1.34]	1.22 [1.10; 1.35]	0.00 [-0.09; 0.09]	1.2 [1.0; 1.6]	1.0 [0.8; 1.3]	1.00 [0.90; 1.09]	1.00 [0.90; 1.10]	0.00 [-0.07; 0.07]
Dominican Republic	1.09 [1.02; 1.18]	1.18 [1.13; 1.34]	0.14 [0.05; 0.23]§	4.9 [3.2; 8.1]	4.0 [2.6; 6.5]	0.97 [0.90; 1.05]	0.98 [0.88; 1.07]	0.00 [-0.08; 0.08]
Ecuador	1.04 [0.95; 1.14]	1.18 [1.06; 1.30]	0.13 [0.05; 0.22]§	3.9 [2.4; 7.0]	3.3 [2.1; 5.9]	1.04 [0.94; 1.15]	1.03 [0.92; 1.14]</td	

Table 6 – continued from previous page

	Sex ratio CMR			Sex-specific CMR in 2012 (per 1,000)		Estimated/Expected female CMR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
Honduras	1.08 [0.99; 1.18]	1.21 [1.10; 1.34]	0.13 [0.05; 0.22]§	3.8 [3.1; 4.9]	3.1 [2.5; 4.0]	0.99 [0.90; 1.09]	1.00 [0.91; 1.10]	0.01 [-0.06; 0.09]
Hungary	1.24 [1.18; 1.29]	1.21 [1.13; 1.28]	-0.03 [-0.11; 0.05]	1.0 [0.9; 1.1]	0.8 [0.8; 0.9]	0.98 [0.94; 1.03]	1.01 [0.94; 1.07]	0.03 [-0.04; 0.09]
Iceland	1.21 [1.09; 1.34]	1.21 [1.08; 1.35]	0.00 [-0.09; 0.09]	0.6 [0.4; 0.7]	0.5 [0.4; 0.6]	1.00 [0.90; 1.12]	1.00 [0.90; 1.12]	0.00 [-0.07; 0.07]
India* †	0.72 [0.69; 0.74]	0.74 [0.70; 0.77]	0.02 [-0.02; 0.06]	11.1 [9.6; 12.9]	15.1 [13.0; 17.6]	1.40 [1.35; 1.45]‡	1.50 [1.42; 1.58]‡	0.10 [0.02; 0.19]§
Indonesia	1.03 [0.98; 1.09]	1.22 [1.13; 1.32]	0.19 [0.11; 0.28]§	5.9 [4.8; 7.2]	4.8 [3.9; 5.9]	0.99 [0.93; 1.04]	0.98 [0.90; 1.06]	-0.01 [-0.12; 0.06]
Iran (Islamic Republic of)*	0.89 [0.81; 0.97]	1.01 [0.91; 1.12]	0.12 [0.05; 0.20]§	2.5 [2.1; 3.1]	2.5 [2.1; 3.1]	1.23 [1.12; 1.35]‡	1.20 [1.08; 1.34]‡	-0.03 [-0.12; 0.06]
Iraq	1.11 [1.01; 1.23]	1.21 [1.09; 1.34]	0.10 [0.01; 0.18]§	6.8 [5.2; 9.0]	5.6 [4.3; 7.5]	0.98 [0.88; 1.08]	0.97 [0.87; 1.09]	-0.01 [-0.09; 0.08]
Ireland	1.24 [1.17; 1.31]	1.23 [1.14; 1.32]	-0.01 [-0.09; 0.08]	0.7 [0.6; 0.7]	0.5 [0.5; 0.6]	0.98 [0.93; 1.04]	0.99 [0.92; 1.06]	0.01 [-0.06; 0.08]
Israel	1.12 [1.07; 1.18]	1.16 [1.09; 1.23]	0.03 [-0.04; 0.11]	1.0 [0.9; 1.1]	0.8 [0.8; 0.9]	1.08 [1.03; 1.13]‡	1.05 [0.98; 1.12]	-0.03 [-0.10; 0.04]
Italy	1.13 [1.10; 1.17]	1.14 [1.08; 1.20]	0.00 [-0.06; 0.07]	0.6 [0.6; 0.7]	0.6 [0.5; 0.6]	1.07 [1.03; 1.11]‡	1.07 [1.01; 1.13]‡	0.00 [-0.07; 0.06]
Jamaica	1.28 [1.15; 1.50]	1.28 [1.15; 1.50]	0.00 [-0.09; 0.09]	2.7 [1.9; 4.3]	2.1 [1.4; 3.4]	0.93 [0.79; 1.04]	0.95 [0.81; 1.05]	0.01 [-0.06; 0.09]
Japan	1.28 [1.25; 1.32]	1.18 [1.13; 1.23]	-0.11 [-0.16; -0.05]§	0.9 [0.8; 0.9]	0.8 [0.7; 0.8]	0.95 [0.92; 0.97]‡	1.03 [0.99; 1.08]	0.08 [0.04; 0.13]§
Jordan	1.04 [0.92; 1.15]	1.10 [0.95; 1.22]	0.06 [-0.02; 0.14]	2.9 [2.3; 3.7]	2.7 [2.1; 3.4]	1.13 [1.01; 1.29]‡	1.11 [0.99; 1.27]	-0.02 [-0.11; 0.06]
Kazakhstan	1.15 [1.03; 1.32]	1.24 [1.11; 1.42]	0.09 [0.00; 0.18]	2.2 [2.1; 2.4]	1.8 [1.6; 2.0]	0.98 [0.85; 1.10]	0.98 [0.85; 1.09]	0.00 [-0.08; 0.07]
Kenya	1.05 [0.99; 1.12]	1.06 [0.98; 1.15]	0.01 [-0.06; 0.08]	26.2 [14.9; 42.4]	24.7 [14.0; 39.8]	0.95 [0.89; 1.01]	0.96 [0.88; 1.05]	0.01 [-0.06; 0.09]
Kiribati	1.01 [0.89; 1.15]	1.07 [0.94; 1.21]	0.06 [-0.02; 0.14]	14.8 [8.9; 24.5]	13.8 [8.3; 23.1]	1.00 [0.88; 1.14]	1.00 [0.87; 1.16]	0.00 [-0.09; 0.10]
Democratic People's Republic of Korea	1.10 [0.97; 1.25]	1.19 [1.05; 1.35]	0.09 [0.00; 0.17]§	6.8 [5.2; 8.8]	5.7 [4.4; 7.4]	1.01 [0.87; 1.15]	0.99 [0.87; 1.14]	-0.01 [-0.09; 0.06]
Republic of Korea	1.13 [1.10; 1.16]	1.17 [1.11; 1.22]	0.03 [-0.03; 0.10]	0.6 [0.6; 0.6]	0.5 [0.5; 0.5]	1.07 [1.04; 1.10]‡	1.04 [0.99; 1.10]	-0.03 [-0.09; 0.03]
Kuwait	1.21 [1.15; 1.28]	1.21 [1.13; 1.30]	0.00 [-0.08; 0.08]	1.7 [1.6; 1.8]	1.4 [1.3; 1.5]	1.00 [0.95; 1.06]	1.00 [0.94; 1.07]	0.00 [-0.06; 0.07]
Kyrgyzstan	1.10 [0.99; 1.25]	1.24 [1.11; 1.41]	0.14 [0.05; 0.23]§	3.4 [2.7; 4.0]	2.7 [2.2; 3.2]	0.98 [0.85; 1.10]	0.98 [0.86; 1.10]	0.00 [-0.07; 0.08]
Lao People's Democratic Republic	0.99 [0.88; 1.12]	1.03 [0.92; 1.16]	0.04 [-0.04; 0.12]	19.0 [14.0; 25.2]	18.4 [13.6; 24.4]	1.00 [0.89; 1.13]	1.01 [0.89; 1.14]	0.00 [-0.08; 0.08]
Latvia	1.29 [1.22; 1.38]	1.29 [1.19; 1.40]	0.00 [-0.09; 0.09]	1.2 [1.1; 1.4]	1.0 [0.8; 1.1]	0.94 [0.88; 1.00]‡	0.94 [0.87; 1.02]	0.00 [-0.06; 0.07]
Lebanon	1.20 [1.08; 1.35]	1.23 [1.10; 1.37]	0.02 [-0.07; 0.11]	1.5 [0.9; 2.3]	1.2 [0.8; 1.9]	0.99 [0.88; 1.10]	0.99 [0.87; 1.08]	0.00 [-0.07; 0.08]
Lesotho	1.09 [0.99; 1.20]	1.05 [0.95; 1.17]	-0.04 [-0.12; 0.04]	28.1 [19.4; 42.8]	26.8 [18.4; 40.9]	0.96 [0.86; 1.06]	0.96 [0.86; 1.07]	0.01 [-0.07; 0.08]
Liberia	1.05 [0.98; 1.12]	1.06 [0.98; 1.15]	0.02 [-0.06; 0.10]	20.6 [13.2; 31.2]	19.3 [12.9; 29.4]	0.97 [0.91; 1.04]	0.97 [0.89; 1.07]	0.00 [-0.08; 0.08]
Libya	1.07 [0.90; 1.19]	1.13 [0.94; 1.26]	0.06 [-0.02; 0.14]	2.3 [1.9; 2.9]	2.1 [1.7; 2.6]	1.10 [0.98; 1.33]	1.08 [0.96; 1.29]	-0.03 [-0.12; 0.06]
Lithuania	1.28 [1.21; 1.34]	1.28 [1.19; 1.37]	0.00 [-0.09; 0.09]	1.1 [1.0; 1.2]	0.8 [0.7; 0.9]	0.95 [0.90; 1.00]‡	0.95 [0.88; 1.02]	0.00 [-0.06; 0.07]
Luxembourg	1.21 [1.08; 1.36]	1.21 [1.08; 1.36]	0.00 [-0.08; 0.09]	0.5 [0.4; 0.7]	0.4 [0.3; 0.6]	1.00 [0.89; 1.13]	1.00 [0.89; 1.13]	0.00 [-0.07; 0.07]
Macedonia	1.07 [0.99; 1.14]	1.09 [0.99; 1.19]	0.02 [-0.06; 0.10]	1.0 [0.8; 1.1]	0.9 [0.7; 1.1]	1.13 [1.06; 1.22]‡	1.11 [1.02; 1.22]‡	-0.02 [-0.10; 0.06]
Madagascar	1.04 [0.99; 1.10]	1.07 [0.99; 1.16]	0.03 [-0.04; 0.11]	18.7 [10.8; 30.4]	17.5 [10.1; 28.2]	0.97 [0.91; 1.02]	0.98 [0.89; 1.07]	0.01 [-0.07; 0.10]
Malawi	1.07 [1.02; 1.12]	1.05 [0.98; 1.13]	-0.02 [-0.09; 0.06]	26.9 [19.4; 38.1]	25.5 [18.4; 36.2]	0.95 [0.91; 1.00]	0.96 [0.89; 1.03]	0.01 [-0.06; 0.08]
Malaysia	1.21 [1.07; 1.38]	1.21 [1.07; 1.38]	0.00 [-0.09; 0.09]	1.3 [1.2; 1.5]	1.1 [1.0; 1.3]	1.00 [0.88; 1.14]	1.00 [0.88; 1.14]	0.00 [-0.07; 0.07]
Maldives	1.00 [0.90; 1.11]	1.21 [1.08; 1.34]	0.20 [0.12; 0.29]§	1.6 [1.5; 1.8]	1.4 [1.2; 1.5]	1.00 [0.90; 1.13]	1.01 [0.90; 1.13]	0.00 [-0.07; 0.08]
Mali	1.01 [0.97; 1.05]	0.99 [0.93; 1.06]	-0.02 [-0.09; 0.05]	52.4 [26.8; 86.4]	52.6 [27.0; 87.6]	1.01 [0.96; 1.05]	1.01 [0.94; 1.08]	0.00 [-0.07; 0.07]
Malta	1.16 [1.03; 1.29]	1.17 [1.03; 1.30]	0.01 [-0.08; 0.09]	1.1 [0.9; 1.3]	0.9 [0.7; 1.1]	1.04 [0.94; 1.17]	1.04 [0.94; 1.17]	-0.01 [-0.08; 0.07]
Marshall Islands	1.10 [0.97; 1.25]	1.16 [1.02; 1.32]	0.06 [-0.02; 0.14]	7.7 [5.3; 11.0]	6.7 [4.6; 9.5]	1.01 [0.88; 1.15]	1.00 [0.87; 1.14]	-0.01 [-0.11; 0.09]
Mauritania	1.04 [0.96; 1.13]	1.07 [0.98; 1.18]	0.03 [-0.04; 0.11]	21.2 [2.9; 47.8]	19.9 [2.8; 44.3]	0.96 [0.88; 1.04]	0.97 [0.87; 1.14]	0.01 [-0.08; 0.17]
Mauritius	1.11 [1.05; 1.18]	1.12 [1.03; 1.21]	0.00 [-0.07; 0.08]	2.3 [1.9; 2.7]	2.0 [1.7; 2.4]	1.09 [1.03; 1.16]‡	1.09 [1.01; 1.17]‡	0.00 [-0.08; 0.07]
Mexico	1.06 [0.99; 1.13]	1.16 [1.12; 1.20]	0.10 [0.03; 0.18]§	2.5 [2.4; 2.6]	2.1 [2.0; 2.2]	1.06 [0.99; 1.13]	1.04 [1.01; 1.08]‡	-0.01 [-0.09; 0.06]
Republic of Moldova	1.19 [1.06; 1.34]	1.22 [1.08; 1.38]	0.03 [-0.06; 0.12]	2.8 [2.0; 4.5]	2.3 [1.6; 3.7]	1.00 [0.88; 1.13]	1.00 [0.88; 1.12]	0.00 [-0.08; 0.08]
Monaco	1.21 [1.06; 1.38]	1.21 [1.07; 1.38]	0.00 [-0.09; 0.09]	0.8 [0.7; 0.9]	0.7 [0.6; 0.8]	1.00 [0.88; 1.14]	1.00 [0.88; 1.14]	0.00 [-0.07; 0.07]
Mongolia	1.10 [0.96; 1.53]	1.31 [1.14; 1.83]	0.21 [0.12; 0.34]§	5.2 [3.2; 8.3]	3.8 [2.3; 6.2]	0.91 [0.65; 1.04]	0.92 [0.65; 1.05]	0.01 [-0.07; 0.08]
Montenegro	1.17 [1.04; 1.30]	1.18 [1.04; 1.32]	0.01 [-0.07; 0.09]	0.4 [0.4; 0.5]	0.4 [0.3; 0.4]	1.03 [0.93; 1.17]	1.03 [0.92; 1.17]	-0.01 [-0.08; 0.07]
Morocco*	0.96 [0.90; 1.03]	1.12 [1.03; 1.22]	0.16 [0.09; 0.24]§	4.8 [4.0; 5.7]	4.2 [3.5; 5.1]	1.09 [1.02; 1.17]‡	1.08 [0.99; 1.18]	-0.01 [-0.09; 0.07]
Mozambique	1.07 [1.00; 1.13]	1.05 [0.98; 1.13]	-0.01 [-0.09; 0.06]	29.2 [23.4; 36.4]	27.7 [22.2; 34.7]	0.95 [0.89; 1.01]	0.96 [0.89; 1.03]	0.00 [-0.06; 0.07]
Myanmar	1.01 [0.91; 1.12]	1.10 [0.99; 1.22]	0.09 [0.01; 0.17]§	12.2 [7.9; 18.3]	11.2 [7.2; 16.7]	0.99 [0.89; 1.10]	1.00 [0.88; 1.13]	0.01 [-0.08; 0.10]
Namibia	1.06 [0.98; 1.17]	1.15 [1.05; 1.27]	0.09 [0.01; 0.17]§	11.4 [7.2; 19.2]	9.9 [6.3; 16.7]	0.95 [0.87; 1.04]	0.96 [0.85; 1.07]	0.00 [-0.09; 0.10]
Nauru	1.07 [0.94; 1.22]	1.16 [1.02; 1.32]	0.09 [0.01; 0.18]§	7.5 [4.3; 12.9]	6.5 [3.7; 11.1]	1.01 [0.87; 1.18]	1.00 [0.86; 1.15]	-0.01 [-0.15; 0.11]
Nepal* †	0.81 [0.76; 0.86]	0.95 [0.87; 1.04]	0.14 [0.08; 0.21]§	8.1 [5.7; 11.4]	8.5 [6.0; 11.9]	1.23 [1.15; 1.31]‡	1.21 [1.08; 1.34]‡	-0.02 [-0.13; 0.08]
Netherlands	1.10 [0.97; 1.25]	1.16 [1.02; 1.32]	0.06 [-0.02; 0.14]	7.7 [5.3; 11.0]	6.7 [4.6; 9.5]	1.01 [0.88; 1.15]	1.00 [0.87; 1.14]	-0.01 [-0.11; 0.09]
New Zealand	1.26 [1.19; 1.33]	1.22 [1.14; 1.31]	-0.04 [-0.12; 0.05]	1.1 [1.0; 1.3]	0.9 [0.8; 1.0]	0.96 [0.91; 1.02]	0.99 [0.92; 1.06]	0.03 [-0.04; 0.10]
Nicaragua	1.09 [1.00; 1.18]	1.25 [1.14; 1.38]	0.16 [0.08; 0.26]§	4.2 [2.6; 7.4]	3.4 [2.1; 6.0]	0.97 [0.88; 1.05]	0.96 [0.87; 1.06]	0.00 [-0.08; 0.07]
Niger*	0.98 [0.94; 1.01]	0.97 [0.90; 1.04]	-0.01 [-0.07; 0.06]	53.3 [36.6; 73.1]	55.0 [37.7; 75.5]	1.04 [1.00; 1.09]‡	1.03 [0.96; 1.10]	-0.01 [-0.08; 0.06]
Nigeria	1.02 [0.98; 1.07]	0.98 [0.92; 1.04]	-0.04 [-0.11; 0.02]	49.3 [37.7; 63.7]	50.4 [38.6; 64.9]	1.00 [0.95; 1.04]	1.02 [0.96; 1.08]	0.02 [-0.04; 0.09]
Niue	1.21 [1.07; 1.38]	1.21 [1.07; 1.38]	0.00 [-0.09; 0.09]	4.3 [2.1; 10.4]	3.6 [1.7; 8.6]	1.00 [0.88; 1.13]	1.04 [0.86; 1.12]	-0.01 [-0.10; 0.07]
Norway	1.31 [1.23; 1.39]	1.27 [1.18; 1.37]	-0.04 [-0.12; 0.06]	0.6 [0.5; 0.7]	0.5 [0.4; 0.5]	0.93 [0.87; 0.98]‡	0.95 [0.88; 1.03]	0.03 [-0.04; 0.09]
Oman	1.08 [0.93; 1.20]	1.16 [0.99; 1.29]	0.08 [0.00; 0.16]	1.8 [1.6; 1.9]	1.5 [1.4; 1.7]	1.07 [0.95; 1.26]	1.05 [0.94; 1.23]	-0.02 [-0.11; 0.06]
Pakistan* †	0.80 [0.76; 0.85]	0.87 [0.81; 0.94]	0.07 [0.01; 0.13]§	16.7 [13.4; 21.0]	19.1 [15.3; 23.9]	1.25 [1.18; 1.32]‡	1.21 [1.11; 1.32]‡	-0.04 [-0.13; 0.06]
Palau	1.18 [1.05; 1.31]	1.16 [1.03; 1.29]	-0.02 [-0.11; 0.06]	6.5 [4.1; 10.2]	5.6 [3.6; 8.9]	1.03 [0.93; 1.15]	1.02 [0.90; 1.16]	-0.01 [-0.10; 0.08]
Panama	1.19 [1.07; 1.33]	1.22 [1.10; 1.37]	0.03 [0.06; 0.12]	2.9 [2.0; 4.9]	2.4 [1.6; 4.0]	1.00 [0.89; 1.12]	0.99 [0.89; 1.11]	-0.01 [-0.08; 0.07]
Papua New Guinea	1.01 [0.89; 1.14]	1.06 [0.93; 1.20]	0.05 [-0.03; 0.12]	15.9 [8.9; 28.2]	14.9 [8.5; 26.7]	1.00 [0.88; 1.14]	1.00 [0.87; 1.16]	0.00 [-0.09; 0.10]
Paraguay	1.12 [1.00; 1.24]	1.21 [1.09; 1.34]	0.09 [0.01; 0.18]§	3.6 [2.4; 6.0]	3.0 [2.0; 5.0]	1.00 [0.90; 1.10]	1.00 [0.90; 1.11]	0.00 [-0.07; 0.08]
Peru	0.98 [0.93; 1.03]	1.17 [1.09; 1.27]	0.20 [0.12; 0.28]§	4.4 [3.6; 5.5]	3.8 [3.1; 4.7]	1.04 [0.99; 1.10]	1.03 [0.95; 1.12]	-0.01 [-0.08; 0.07]
Philippines	1.06 [0.99; 1.13]	1.20 [1.10; 1.30]	0.14 [0.06; 0.23]§	7.1 [4.8; 11.8]	5.9 [4.0; 9.8]	0.98 [0.92; 1.05]	0.98 [0.88; 1.07]	-0.01 [-0.10; 0.0

Table 6 – continued from previous page

	Sex ratio CMR			Sex-specific CMR in 2012 (per 1,000)		Estimated/Expected female CMR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
Syria	1.10 [0.98; 1.20]	1.15 [1.03; 1.28]	0.06 [-0.02; 0.14]	3.0 [ 2.4; 3.8]	2.6 [ 2.1; 3.3]	1.06 [0.96; 1.20]	1.05 [0.95; 1.18]	-0.01 [-0.09; 0.07]
Tajikistan	1.04 [0.92; 1.18]	1.13 [1.01; 1.28]	0.09 [ 0.01; 0.17]§	10.3 [ 3.7; 29.1]	9.2 [ 3.3; 25.8]	0.98 [0.86; 1.11]	0.99 [0.84; 1.15]	0.01 [-0.12; 0.13]
Tanzania*	1.07 [1.01; 1.12]	1.11 [1.03; 1.20]	0.04 [-0.04; 0.12]	17.8 [11.9; 26.3]	16.0 [10.6; 23.8]	0.94 [0.89; 0.99]‡	0.94 [0.87; 1.03]	0.00 [-0.07; 0.08]
Thailand	1.18 [1.07; 1.29]	1.22 [1.11; 1.35]	0.05 [-0.04; 0.14]	2.0 [ 1.4; 3.1]	1.7 [ 1.2; 2.5]	0.98 [0.89; 1.08]	0.99 [0.90; 1.09]	0.01 [-0.07; 0.09]
Timor Leste	1.01 [0.92; 1.11]	1.14 [1.04; 1.25]	0.13 [ 0.05; 0.21]§	9.9 [ 6.2; 15.4]	8.7 [ 5.4; 13.6]	0.99 [0.90; 1.08]	0.98 [0.88; 1.10]	0.00 [-0.09; 0.09]
Togo	1.04 [0.98; 1.11]	1.04 [0.95; 1.13]	0.00 [-0.08; 0.07]	36.4 [25.4; 51.0]	35.0 [24.5; 49.6]	0.96 [0.90; 1.02]	0.96 [0.89; 1.05]	0.01 [-0.06; 0.08]
Tonga	1.21 [1.07; 1.38]	1.21 [1.06; 1.38]	0.00 [-0.09; 0.09]	2.0 [ 1.2; 3.7]	1.6 [ 1.0; 3.0]	1.00 [0.88; 1.14]	1.00 [0.88; 1.14]	0.00 [-0.07; 0.07]
Trinidad and Tobago	1.15 [1.00; 1.28]	1.16 [1.00; 1.29]	0.01 [-0.07; 0.09]	2.4 [ 1.4; 5.1]	2.1 [ 1.2; 4.5]	1.05 [0.95; 1.22]	1.04 [0.94; 1.21]	-0.01 [-0.09; 0.07]
Tunisia*	0.97 [0.86; 1.07]	1.07 [0.93; 1.19]	0.10 [ 0.02; 0.18]§	2.3 [ 1.9; 2.9]	2.2 [ 1.8; 2.7]	1.14 [1.02; 1.30]‡	1.14 [1.02; 1.31]‡	0.00 [-0.09; 0.09]
Turkey	0.99 [0.91; 1.08]	1.17 [1.06; 1.30]	0.18 [ 0.10; 0.27]§	2.2 [ 1.5; 3.4]	1.8 [ 1.3; 2.9]	1.04 [0.95; 1.15]	1.03 [0.94; 1.14]	-0.01 [-0.09; 0.07]
Turkmenistan	1.07 [0.95; 1.27]	1.17 [1.04; 1.39]	0.11 [ 0.02; 0.19]§	9.0 [ 3.7; 21.0]	7.7 [ 3.1; 17.6]	0.97 [0.81; 1.10]	0.96 [0.79; 1.12]	0.00 [-0.12; 0.11]
Tuvalu	0.96 [0.59; 1.11]	1.07 [0.66; 1.24]	0.11 [ 0.04; 0.19]§	5.1 [ 2.9; 9.2]	5.0 [ 3.0; 9.0]	1.13 [0.97; 1.90]	1.11 [0.95; 1.83]	-0.02 [-0.15; 0.08]
Uganda* †	1.16 [1.10; 1.22]	1.16 [1.08; 1.25]	0.01 [-0.08; 0.09]	26.4 [20.3; 34.7]	22.7 [17.4; 29.9]	0.87 [0.83; 0.92]‡	0.87 [0.81; 0.94]‡	0.00 [-0.06; 0.06]
Ukraine	1.25 [1.22; 1.28]	1.25 [1.20; 1.30]	0.00 [-0.06; 0.06]	1.7 [ 1.6; 1.8]	1.4 [ 1.3; 1.5]	0.97 [0.94; 1.00]‡	0.97 [0.93; 1.02]	0.00 [-0.04; 0.05]
United Arab Emirates	1.22 [1.08; 1.37]	1.21 [1.08; 1.37]	0.00 [-0.09; 0.09]	1.5 [ 1.2; 1.5]	1.1 [ 1.0; 1.3]	1.00 [0.89; 1.12]	1.00 [0.88; 1.12]	0.00 [-0.07; 0.07]
United Kingdom	1.21 [1.18; 1.25]	1.17 [1.12; 1.23]	-0.04 [-0.10; 0.02]	0.8 [ 0.8; 0.8]	0.7 [ 0.6; 0.7]	1.00 [0.97; 1.03]	1.03 [0.99; 1.09]	0.03 [-0.02; 0.09]
United States of America	1.25 [1.23; 1.27]	1.24 [1.19; 1.29]	-0.01 [-0.07; 0.04]	1.2 [ 1.0; 1.4]	1.0 [ 0.8; 1.1]	0.97 [0.95; 0.99]‡	0.98 [0.94; 1.02]	0.01 [-0.03; 0.06]
Uruguay	1.14 [1.09; 1.20]	1.16 [1.09; 1.24]	0.02 [-0.06; 0.10]	1.1 [ 0.8; 1.6]	0.9 [ 0.7; 1.3]	1.06 [1.01; 1.12]‡	1.04 [0.97; 1.12]	-0.02 [-0.09; 0.05]
Uzbekistan	1.10 [0.98; 1.29]	1.24 [1.10; 1.46]	0.14 [ 0.05; 0.23]§	6.0 [ 2.6; 13.7]	4.8 [ 2.0; 10.9]	0.97 [0.82; 1.10]	0.95 [0.79; 1.08]	-0.02 [-0.13; 0.07]
Vanuatu	1.18 [1.04; 1.34]	1.21 [1.06; 1.37]	0.03 [-0.06; 0.11]	2.8 [ 1.5; 6.4]	2.3 [ 1.3; 5.3]	1.00 [0.87; 1.14]	1.00 [0.88; 1.14]	0.01 [-0.08; 0.09]
Venezuela (Bolivarian Republic of)	1.11 [0.94; 1.24]	1.13 [0.94; 1.27]	0.01 [-0.06; 0.10]	2.3 [ 2.0; 2.5]	2.0 [ 1.8; 2.3]	1.09 [0.97; 1.30]	1.08 [0.96; 1.29]	-0.01 [-0.09; 0.07]
Vietnam	1.10 [1.01; 1.23]	1.25 [1.13; 1.39]	0.14 [ 0.06; 0.23]§	5.2 [ 4.9; 5.6]	4.2 [ 3.9; 4.5]	0.96 [0.86; 1.06]	0.97 [0.87; 1.07]	0.00 [-0.07; 0.08]
Yemen*	0.93 [0.87; 0.99]	1.01 [0.92; 1.09]	0.08 [ 0.01; 0.15]§	14.3 [ 8.3; 24.2]	14.3 [ 8.3; 24.0]	1.07 [1.01; 1.15]‡	1.06 [0.96; 1.19]	-0.01 [-0.10; 0.10]
Zambia	1.06 [1.01; 1.11]	1.07 [0.99; 1.15]	0.01 [-0.06; 0.09]	35.1 [20.5; 63.0]	33.0 [18.9; 58.9]	0.96 [0.91; 1.01]	0.94 [0.87; 1.01]	-0.02 [-0.08; 0.05]
Zimbabwe	1.04 [0.97; 1.11]	1.02 [0.94; 1.10]	-0.02 [-0.09; 0.06]	36.4 [25.7; 52.8]	35.7 [25.1; 51.6]	0.98 [0.91; 1.05]	0.98 [0.90; 1.07]	0.00 [-0.07; 0.08]

\* : Sex ratio is outlying in 1990. †: Sex ratio is outlying in 2012. ‡: Ratio of estimated to expected female mortality is significantly different from one. §: Change is significantly different from zero.

**Table 7: Estimates and 90% uncertainty intervals for sex ratios for U5MR in 1990 and 2012, the change in sex ratios from 1990 to 2012, sex-specific U5MR in 2012 (per 1,000), Estimated/Expected female U5MR and their change from 1990 to 2012 for the world, MDG regions, and all countries.** \* : Sex ratio is outlying in 1990. †: Sex ratio is outlying in 2012. §: Ratio of estimated to expected female mortality is significantly different from one. §: Change is significantly different from zero.

	Sex ratio U5MR			Sex-specific U5MR in 2012 (per 1,000)		Estimated/Expected female U5MR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
World* †	1.05 [1.04; 1.06]	1.08 [1.07; 1.09]	0.02 [0.01; 0.04]§	50.1 [47.9; 52.5]	46.4 [44.3; 48.7]	1.06 [1.05; 1.08]‡	1.06 [1.05; 1.07]‡	-0.01 [-0.02; 0.01]
Developed regions	1.28 [1.28; 1.29]	1.22 [1.21; 1.24]	-0.06 [-0.07; -0.04]§	6.9 [6.6; 7.3]	5.6 [5.4; 5.9]	0.97 [0.96; 0.98]‡	0.99 [0.98; 1.01]	0.03 [0.01; 0.04]§
Northern Africa* †	1.07 [1.05; 1.09]	1.18 [1.15; 1.20]	0.11 [0.08; 0.14]§	24.0 [21.7; 27.0]	20.4 [18.6; 22.9]	1.09 [1.07; 1.11]‡	1.06 [1.04; 1.09]‡	-0.03 [-0.06; 0.00]
Sub-Saharan Africa*	1.11 [1.10; 1.12]	1.13 [1.11; 1.14]	0.02 [0.00; 0.04]§	104.7 [97.2; 113.2]	92.9 [86.1; 100.6]	0.99 [0.98; 1.00]‡	0.99 [0.98; 1.01]	0.00 [0.01; 0.02]
Eastern Asia*	1.09 [1.03; 1.15]	1.15 [1.08; 1.22]	0.06 [0.00; 0.13]	15.0 [13.1; 17.4]	13.1 [11.4; 15.2]	1.09 [1.03; 1.16]‡	1.08 [1.02; 1.15]‡	-0.01 [-0.08; 0.05]
Southern Asia* †	0.97 [0.95; 0.98]	0.98 [0.96; 1.00]	0.01 [-0.01; 0.04]	57.3 [53.3; 61.5]	58.6 [54.3; 63.0]	1.16 [1.14; 1.18]‡	1.21 [1.19; 1.24]‡	0.05 [0.02; 0.09]§
South-eastern Asia*	1.18 [1.16; 1.21]	1.26 [1.22; 1.30]	0.08 [0.04; 0.11]§	33.9 [30.6; 37.7]	27.0 [24.3; 30.0]	0.97 [0.95; 0.99]‡	0.97 [0.94; 1.00]	0.00 [-0.02; 0.03]
Western Asia*	1.13 [1.10; 1.15]	1.19 [1.16; 1.23]	0.06 [0.03; 0.10]§	27.1 [23.3; 31.8]	22.7 [19.5; 26.8]	1.03 [1.01; 1.06]‡	1.02 [0.99; 1.05]	-0.01 [-0.04; 0.02]
Caucasus and Central Asia* †	1.24 [1.21; 1.28]	1.28 [1.23; 1.34]	0.04 [0.00; 0.08]§	41.7 [31.7; 56.3]	32.5 [24.6; 44.1]	0.94 [0.91; 0.97]‡	0.94 [0.90; 0.98]‡	0.00 [-0.03; 0.04]
Latin America and the Caribbean	1.19 [1.16; 1.22]	1.24 [1.22; 1.26]	0.05 [0.02; 0.08]§	21.1 [20.1; 22.2]	17.0 [16.2; 17.9]	0.99 [0.97; 1.02]	1.00 [0.98; 1.02]	0.00 [-0.02; 0.03]
Oceania	1.14 [1.07; 1.23]	1.18 [1.09; 1.27]	0.03 [-0.03; 0.09]	59.1 [42.4; 84.2]	50.3 [35.8; 72.5]	1.00 [0.93; 1.07]	1.00 [0.92; 1.08]	0.00 [-0.06; 0.06]
Afghanistan* †	1.05 [1.00; 1.09]	1.07 [1.02; 1.12]	0.02 [-0.03; 0.08]	101.5 [86.8; 119.4]	95.0 [81.4; 112.3]	1.05 [1.01; 1.10]‡	1.06 [1.01; 1.11]‡	0.01 [-0.05; 0.06]
Albania	1.19 [1.10; 1.28]	1.21 [1.11; 1.30]	0.02 [0.06; 0.10]	18.3 [11.3; 27.5]	15.2 [9.3; 22.8]	1.03 [0.96; 1.11]	1.03 [0.96; 1.12]	0.01 [-0.06; 0.08]
Algeria	1.20 [1.17; 1.23]	1.25 [1.19; 1.31]	0.05 [-0.02; 0.12]	22.2 [14.6; 33.7]	17.8 [11.7; 26.9]	1.00 [0.98; 1.03]	1.00 [0.95; 1.05]	-0.01 [-0.06; 0.05]
Andorra	1.22 [1.12; 1.33]	1.20 [1.10; 1.30]	-0.02 [-0.10; 0.05]	3.5 [3.1; 4.0]	2.9 [2.6; 3.4]	1.00 [0.92; 1.08]	1.00 [0.92; 1.09]	0.00 [-0.06; 0.06]
Angola	1.10 [1.06; 1.14]	1.10 [1.05; 1.16]	0.00 [-0.05; 0.06]	17.2 [11.9; 24.7]	155.6 [105.3; 225.5]	0.99 [0.95; 1.03]	0.99 [0.94; 1.05]	0.00 [-0.04; 0.05]
Antigua and Barbuda	1.25 [1.16; 1.36]	1.24 [1.13; 1.35]	-0.02 [-0.10; 0.06]	10.9 [8.1; 14.6]	8.8 [6.5; 11.9]	1.00 [0.92; 1.08]	1.00 [0.92; 1.09]	0.00 [-0.06; 0.07]
Argentina	1.25 [1.23; 1.26]	1.23 [1.20; 1.27]	-0.02 [-0.06; 0.03]	15.7 [15.0; 16.5]	12.7 [12.1; 13.4]	1.00 [0.99; 1.02]	1.01 [0.98; 1.04]	0.01 [-0.02; 0.04]
Armenia	1.22 [1.14; 1.30]	1.25 [1.17; 1.35]	0.03 [-0.04; 0.12]	18.2 [14.7; 22.9]	14.5 [11.7; 18.3]	0.99 [0.92; 1.06]	1.00 [0.93; 1.07]	0.01 [-0.06; 0.07]
Australia	1.28 [1.25; 1.31]	1.28 [1.23; 1.32]	0.00 [-0.05; 0.05]	5.4 [5.1; 5.8]	4.3 [4.0; 4.5]	0.96 [0.94; 0.98]‡	0.96 [0.94; 0.97]‡	-0.02 [-0.06; 0.02]
Austria	1.26 [1.23; 1.30]	1.24 [1.19; 1.30]	-0.02 [-0.08; 0.04]	4.4 [4.1; 4.8]	3.6 [3.3; 3.9]	0.97 [0.94; 1.00]	0.96 [0.92; 1.01]	-0.01 [-0.06; 0.04]
Azerbaijan	1.18 [1.13; 1.24]	1.18 [1.11; 1.26]	0.00 [-0.07; 0.07]	38.0 [26.1; 53.8]	32.2 [22.2; 45.5]	0.97 [0.92; 1.02]	1.05 [0.98; 1.12]	0.08 [0.01; 0.15]§
Bahamas*	1.16 [1.11; 1.22]	1.17 [1.09; 1.25]	0.00 [-0.06; 0.07]	18.1 [14.4; 22.8]	15.5 [12.3; 19.5]	1.07 [1.02; 1.13]‡	1.06 [1.00; 1.14]‡	-0.01 [-0.07; 0.05]
Bahrain* †	1.07 [1.02; 1.12]	1.07 [1.00; 1.15]	0.00 [-0.06; 0.07]	9.9 [8.3; 11.7]	9.2 [7.8; 10.9]	1.17 [1.12; 1.23]‡	1.14 [1.07; 1.22]‡	-0.03 [-0.09; 0.04]
Bangladesh* †	1.04 [1.02; 1.07]	1.15 [1.10; 1.20]	0.11 [0.06; 0.17]§	43.7 [41.2; 46.4]	37.9 [35.7; 40.4]	1.07 [1.04; 1.09]‡	1.06 [1.01; 1.11]‡	-0.01 [-0.06; 0.05]
Barbados	1.21 [1.15; 1.28]	1.19 [1.11; 1.28]	-0.02 [-0.10; 0.06]	19.9 [15.7; 25.3]	16.7 [13.1; 21.3]	1.03 [0.98; 1.09]	1.05 [0.98; 1.13]	0.02 [-0.05; 0.09]
Belarus*	1.35 [1.32; 1.38]	1.29 [1.24; 1.34]	-0.06 [-0.12; 0.00]	5.8 [5.3; 6.5]	4.5 [4.1; 5.0]	0.92 [0.90; 0.95]‡	0.93 [0.89; 0.97]‡	0.01 [-0.04; 0.05]
Belgium	1.31 [1.28; 1.34]	1.26 [1.20; 1.31]	-0.05 [-0.11; 0.01]	4.6 [4.2; 5.1]	3.7 [3.3; 4.1]	0.94 [0.91; 0.97]	0.95 [0.91; 0.99]‡	0.01 [-0.03; 0.06]
Belize	1.20 [1.13; 1.28]	1.24 [1.16; 1.32]	0.03 [-0.04; 0.11]	20.2 [17.0; 23.9]	16.3 [13.7; 19.3]	1.01 [0.94; 1.08]	1.01 [0.95; 1.08]	0.00 [-0.06; 0.07]
Benin	1.08 [1.05; 1.11]	1.10 [1.05; 1.15]	0.02 [-0.03; 0.07]	93.6 [63.3; 131.7]	85.1 [57.9; 119.5]	1.01 [0.98; 1.04]	1.02 [0.97; 1.08]	0.01 [-0.04; 0.07]
Bhutan	1.10 [1.04; 1.15]	1.20 [1.13; 1.28]	0.10 [0.04; 0.17]§	48.5 [36.0; 65.3]	40.5 [30.0; 54.4]	1.01 [0.94; 1.07]	1.01 [0.94; 1.08]	-0.01 [-0.07; 0.06]
Bolivia (Plurinational State of)	1.11 [1.08; 1.14]	1.21 [1.14; 1.27]	0.10 [0.03; 0.16]§	45.1 [34.8; 58.6]	37.5 [28.9; 48.6]	1.00 [0.97; 1.04]	1.01 [0.95; 1.07]	0.00 [-0.05; 0.06]
Bosnia and Herzegovina	1.26 [1.22; 1.30]	1.24 [1.18; 1.30]	-0.02 [-0.08; 0.05]	7.3 [6.7; 8.0]	5.9 [5.4; 6.5]	1.00 [0.96; 1.03]	0.97 [0.93; 1.02]	-0.02 [-0.07; 0.03]
Botswana	1.19 [1.13; 1.27]	1.18 [1.10; 1.25]	-0.02 [-0.08; 0.05]	57.5 [27.2; 104.5]	48.7 [17.9; 88.6]	1.00 [0.94; 1.07]	1.01 [0.93; 1.10]	0.00 [-0.07; 0.09]
Brazil	1.22 [1.15; 1.29]	1.28 [1.19; 1.38]	0.06 [-0.02; 0.14]	16.2 [14.8; 17.7]	12.6 [11.5; 13.9]	0.97 [0.92; 1.03]	0.98 [0.90; 1.05]	0.00 [-0.06; 0.07]
Brunei	1.21 [1.14; 1.29]	1.20 [1.12; 1.29]	-0.01 [-0.08; 0.06]	8.7 [7.6; 10.1]	7.2 [6.3; 8.4]	1.01 [0.96; 1.08]	1.01 [0.95; 1.08]	0.00 [-0.06; 0.06]
Bulgaria	1.27 [1.24; 1.30]	1.23 [1.18; 1.28]	-0.04 [-0.09; 0.02]	13.3 [12.6; 14.0]	10.8 [10.3; 11.4]	0.99 [0.96; 1.01]	1.01 [0.97; 1.05]	0.02 [-0.02; 0.07]
Burkina Faso	1.08 [1.05; 1.11]	1.10 [1.06; 1.15]	0.02 [-0.03; 0.07]	107.4 [87.7; 130.2]	97.0 [79.3; 117.6]	1.00 [0.97; 1.03]	1.01 [0.96; 1.05]	0.01 [-0.04; 0.06]
Burundi	1.12 [1.08; 1.17]	1.14 [1.08; 1.20]	0.01 [-0.04; 0.07]	110.8 [70.0; 160.6]	97.7 [61.4; 141.8]	0.97 [0.94; 1.01]	0.98 [0.93; 1.04]	0.01 [-0.04; 0.06]
Cambodia	1.14 [1.10; 1.19]	1.26 [1.19; 1.33]	0.12 [0.04; 0.19]§	44.1 [26.3; 78.7]	35.1 [20.9; 62.7]	0.98 [0.94; 1.02]	0.97 [0.90; 1.03]	-0.01 [-0.08; 0.06]
Cameroon	1.12 [1.09; 1.16]	1.14 [1.08; 1.19]	0.01 [-0.04; 0.07]	100.9 [65.1; 160.7]	88.6 [57.4; 140.9]	0.98 [0.94; 1.01]	0.98 [0.93; 1.04]	0.00 [-0.05; 0.06]
Canada	1.24 [1.22; 1.27]	1.17 [1.13; 1.22]	-0.07 [-0.12; -0.02]§	5.7 [5.1; 6.3]	4.8 [4.3; 5.4]	0.98 [0.96; 1.00]	1.02 [0.98; 1.06]	0.04 [0.00; 0.08]
Cape Verde	1.17 [1.08; 1.26]	1.25 [1.15; 1.36]	0.08 [0.01; 0.16]§	24.6 [21.1; 28.7]	19.6 [16.8; 23.0]	1.00 [0.93; 1.09]	1.00 [0.92; 1.09]	0.00 [-0.07; 0.06]
Central African Republic	1.08 [1.05; 1.12]	1.10 [1.05; 1.16]	0.02 [-0.04; 0.07]	134.9 [95.7; 193.3]	121.9 [86.6; 175.0]	1.01 [0.98; 1.05]	1.01 [0.96; 1.06]	0.00 [-0.05; 0.05]
Chad	1.09 [1.06; 1.13]	1.10 [1.05; 1.15]	0.01 [0.04; 0.06]	157.0 [114.1; 211.2]	142.3 [103.7; 192.2]	0.99 [0.96; 1.02]	0.99 [0.95; 1.04]	0.00 [-0.04; 0.05]
Chile	1.22 [1.20; 1.25]	1.21 [1.17; 1.26]	-0.01 [-0.06; 0.04]	9.9 [8.0; 12.4]	8.2 [6.6; 10.2]	1.02 [1.00; 1.04]‡	1.01 [0.97; 1.05]	-0.01 [-0.05; 0.03]
China* †	1.09 [1.02; 1.15]	1.15 [1.07; 1.22]	0.06 [-0.01; 0.13]	15.0 [13.0; 17.5]	13.1 [11.3; 15.2]	1.09 [1.03; 1.17]‡	1.08 [1.02; 1.16]‡	-0.01 [-0.08; 0.05]
Colombia	1.26 [1.20; 1.32]	1.27 [1.19; 1.35]	0.01 [-0.07; 0.09]	19.6 [14.9; 26.2]	15.5 [11.7; 20.7]	0.98 [0.93; 1.03]	0.98 [0.93; 1.05]	0.00 [-0.05; 0.06]
Comoros	1.12 [1.06; 1.20]	1.16 [1.08; 1.24]	0.03 [-0.03; 0.09]	83.1 [48.9; 147.4]	71.9 [42.1; 127.6]	0.99 [0.93; 1.05]	0.99 [0.92; 1.08]	0.00 [-0.06; 0.08]
Congo	1.12 [1.06; 1.18]	1.12 [1.06; 1.19]	0.00 [-0.06; 0.06]	101.4 [64.8; 149.9]	90.2 [57.8; 133.5]	1.00 [0.94; 1.07]	1.00 [0.94; 1.07]	0.00 [-0.05; 0.06]
Democratic Republic of the Congo	1.10 [1.06; 1.14]	1.12 [1.07; 1.18]	0.02 [-0.03; 0.08]	154.0 [116.1; 204.3]	137.1 [103.4; 181.0]	1.00 [0.96; 1.03]	0.98 [0.94; 1.03]	-0.01 [-0.06; 0.04]
Cook Islands	1.26 [1.17; 1.35]	1.23 [1.15; 1.33]	-0.02 [-0.10; 0.06]	11.6 [8.7; 15.2]	9.4 [7.0; 12.4]	0.99 [0.93; 1.07]	1.00 [0.93; 1.08]	0.00 [-0.06; 0.07]
Costa Rica	1.26 [1.22; 1.29]	1.22 [1.17; 1.27]	-0.03 [-0.09; 0.02]	10.8 [9.2; 12.7]	8.9 [7.5; 10.4]	0.99 [0.97; 1.02]	1.01 [0.97; 1.05]	0.01 [-0.03; 0.06]
Côte d'Ivoire*	1.17 [1.12; 1.21]	1.17 [1.10; 1.24]	0.04 [-0.06; 0.06]	115.7 [90.7; 145.7]	99.1 [77.6; 124.8]	0.95 [0.91; 0.98]‡	0.96 [0.90; 1.02]	0.01 [-0.04; 0.07]
Croatia	1.29 [1.25; 1.33]	1.19 [1.13; 1.25]	-0.10 [-0.17; -0.03]§	5.0 [4.6; 5.4]	4.2 [3.9; 4.6]	0.96 [0.93; 1.00]‡	1.01 [0.96; 1.06]	0.04 [-0.01; 0.10]
Cuba	1.30 [1.27; 1.33]	1.23 [1.19; 1.29]	-0.07 [-0.12; -0.01]§	6.1 [5.2; 7.0]	4.9 [4.2; 5.7]	0.95 [0.93; 0.97]‡	0.97 [0.93; 1.01]	0.02 [-0.02; 0.06]
Cyprus	1.23 [1.16; 1.30]	1.19 [1.11; 1.26]	-0.04 [-0.11; 0.03]	3.5 [2.8; 4.3]	2.9 [2.4; 3.6]	1.01 [0.96; 1.06]	1.01 [0.95; 1.08]	0.00 [-0.06; 0.06]
Czech Republic	1.32 [1.28; 1.35]	1.26 [1.21; 1.32]	-0.06 [-0.12; 0.02]	4.2 [3.9; 4.5]	3.3 [3.1; 3.6]	0.95 [0.92; 0.97]‡	0.95 [0.91; 0.99]‡	0.00 [-0.04; 0.05]
Denmark	1.28 [1.24; 1.33]	1.22 [1.16; 1.28]	-0.07 [-0.13; 0.03]§	4.0 [3.7; 4.5]	3.3 [3.0; 3.7]	0.95 [0.92; 0.99]‡	0.99 [0.94; 1.03]	0.03 [-0.02; 0.08]
Djibouti	1.12 [1.05; 1.20]	1.15 [1.07; 1.23]	0.03 [-0.04; 0.09]	86.2 [52.2; 137.2]	75.3 [45.5; 119.7]	1.01 [0.94; 1.08]	1.01 [0.94; 1.10]	0.01 [-0.06; 0.08]
Dominica	1.19 [1.11; 1.27]	1.19 [1.09; 1.28]	0.00 [-0.07; 0.08]	13.6 [10.9; 17.2]	11.5 [9.2; 14.5]	1.05 [0.99; 1.14]	1.00 [-0.07; 0.06]	-0.01 [-0.07; 0.06]
Dominican Republic	1.16 [1.12; 1.21]	1.23 [1.15; 1.31]						

Table 7 – continued from previous page

	Sex ratio U5MR			Sex-specific U5MR in 2012 (per 1,000)		Estimated/Expected female U5MR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
Haiti	1.13 [1.08; 1.17]	1.18 [1.11; 1.24]	0.05 [-0.01; 0.11]	81.5 [70.7; 95.6]	69.4 [60.1; 81.3]	0.98 [0.94; 1.02]	0.98 [0.93; 1.03]	0.00 [-0.06; 0.05]
Honduras	1.19 [1.13; 1.26]	1.27 [1.19; 1.35]	0.07 [0.00; 0.15]	25.5 [21.4; 30.3]	20.1 [16.8; 24.0]	0.98 [0.93; 1.04]	0.99 [0.92; 1.05]	0.00 [-0.06; 0.06]
Hungary	1.25 [1.22; 1.28]	1.17 [1.12; 1.22]	-0.08 [-0.13; -0.02]§	6.7 [6.1; 7.4]	5.7 [5.2; 6.3]	1.00 [0.98; 1.03]	1.03 [0.98; 1.07]	0.02 [-0.02; 0.07]
Iceland	1.20 [1.13; 1.28]	1.20 [1.12; 1.29]	0.00 [-0.07; 0.07]	2.5 [1.9; 3.3]	2.1 [1.6; 2.7]	1.00 [0.94; 1.06]	1.00 [0.93; 1.07]	0.00 [-0.06; 0.06]
India* †	0.94 [0.92; 0.95]	0.92 [0.90; 0.95]	-0.02 [-0.05; 0.02]	54.1 [49.0; 59.9]	58.7 [53.2; 65.1]	1.20 [1.17; 1.23]‡	1.30 [1.26; 1.34]‡	0.10 [0.06; 0.15]§
Indonesia	1.17 [1.14; 1.21]	1.27 [1.20; 1.34]	0.10 [0.03; 0.17]§	34.6 [30.0; 39.9]	27.2 [23.5; 31.4]	0.97 [0.94; 1.00]	0.98 [0.92; 1.03]	0.00 [-0.05; 0.06]
Iran (Islamic Republic of)* †	1.03 [0.99; 1.08]	1.11 [1.04; 1.18]	0.08 [0.01; 0.15]§	18.5 [15.6; 21.7]	16.6 [14.1; 19.6]	1.16 [1.10; 1.21]‡	1.13 [1.06; 1.20]‡	-0.03 [-0.10; 0.04]
Iraq	1.17 [1.11; 1.23]	1.22 [1.15; 1.29]	0.05 [0.02; 0.11]	37.6 [31.1; 45.4]	30.9 [25.5; 37.3]	1.02 [0.96; 1.07]	1.01 [0.96; 1.08]	0.00 [-0.06; 0.06]
Ireland	1.24 [1.20; 1.28]	1.21 [1.15; 1.27]	-0.03 [-0.10; 0.03]	4.3 [3.9; 4.9]	3.6 [3.2; 4.0]	0.99 [0.96; 1.02]	0.99 [0.95; 1.04]	0.00 [-0.05; 0.06]
Israel	1.14 [1.11; 1.17]	1.15 [1.10; 1.19]	0.01 [-0.04; 0.06]	4.5 [4.1; 4.9]	3.9 [3.6; 4.3]	1.08 [1.05; 1.11]‡	1.04 [1.00; 1.09]‡	-0.04 [-0.08; 0.01]
Italy	1.21 [1.19; 1.24]	1.17 [1.13; 1.21]	-0.04 [-0.09; 0.00]	4.1 [3.8; 4.5]	3.5 [3.2; 3.8]	1.01 [0.99; 1.03]	1.02 [0.98; 1.06]	0.01 [-0.03; 0.05]
Jamaica	1.29 [1.20; 1.39]	1.29 [1.20; 1.40]	0.00 [-0.08; 0.08]	18.9 [13.3; 27.7]	14.6 [10.2; 21.5]	0.96 [0.89; 1.04]	0.97 [0.89; 1.04]	0.00 [-0.06; 0.06]
Japan	1.20 [1.18; 1.22]	1.14 [1.11; 1.17]	-0.06 [-0.10; -0.02]§	3.2 [3.1; 3.4]	2.8 [2.7; 3.0]	1.00 [0.98; 1.02]	1.05 [1.02; 1.08]‡	0.05 [0.02; 0.09]§
Jordan* †	1.08 [1.03; 1.14]	1.12 [1.03; 1.20]	0.03 [0.04; 0.10]	20.1 [16.8; 24.1]	18.0 [15.0; 21.6]	1.14 [1.08; 1.20]‡	1.12 [1.04; 1.21]‡	-0.02 [-0.09; 0.05]
Kazakhstan* †	1.29 [1.21; 1.38]	1.36 [1.26; 1.47]	0.07 [-0.01; 0.15]	21.5 [20.3; 22.9]	15.8 [14.8; 16.9]	0.93 [0.87; 0.99]‡	0.92 [0.85; 0.99]‡	0.00 [-0.06; 0.05]
Kenya	1.11 [1.08; 1.15]	1.14 [1.09; 1.20]	0.03 [0.03; 0.08]	77.7 [52.8; 111.5]	67.9 [46.1; 97.4]	1.00 [0.97; 1.03]	1.00 [0.94; 1.06]	0.00 [-0.06; 0.06]
Kiribati	1.13 [1.05; 1.23]	1.18 [1.09; 1.27]	0.04 [-0.02; 0.11]	64.6 [46.0; 91.0]	54.9 [39.0; 77.4]	1.00 [0.92; 1.08]	1.00 [0.92; 1.09]	0.00 [-0.07; 0.07]
Democratic People's Republic of Korea	1.20 [1.11; 1.31]	1.24 [1.14; 1.35]	0.04 [-0.04; 0.11]	31.8 [24.6; 40.8]	25.7 [19.9; 32.9]	1.00 [0.92; 1.09]	1.00 [0.92; 1.08]	0.00 [-0.06; 0.06]
Republic of Korea	1.06 [1.03; 1.08]	1.16 [1.12; 1.20]	0.10 [0.06; 0.15]§	4.1 [3.9; 4.3]	3.5 [3.3; 3.7]	1.14 [1.12; 1.17]‡	1.03 [0.99; 1.07]	-0.11 [-0.16; -0.07]§
Kuwait	1.18 [1.15; 1.22]	1.18 [1.13; 1.23]	-0.01 [-0.07; 0.05]	11.9 [11.0; 12.8]	10.1 [9.3; 10.9]	1.05 [1.02; 1.09]‡	1.05 [1.01; 1.09]‡	-0.01 [-0.05; 0.05]
Kyrgyzstan	1.20 [1.12; 1.28]	1.27 [1.18; 1.38]	0.08 [0.00; 0.16]§	29.7 [25.0; 33.3]	23.3 [19.6; 26.2]	0.98 [0.91; 1.05]	0.98 [0.91; 1.06]	0.00 [-0.06; 0.06]
Lao People's Democratic Republic	1.10 [1.03; 1.18]	1.15 [1.07; 1.24]	0.05 [-0.01; 0.12]	76.7 [62.6; 92.8]	66.5 [54.3; 80.6]	1.00 [0.94; 1.08]	1.00 [0.93; 1.08]	0.00 [-0.06; 0.06]
Latvia	1.29 [1.25; 1.33]	1.19 [1.13; 1.25]	-0.09 [-0.16; -0.02]§	9.4 [8.3; 10.8]	7.9 [6.9; 9.1]	0.97 [0.94; 1.00]	1.03 [0.98; 1.08]	0.05 [0.00; 0.11]
Lebanon*	1.11 [1.02; 1.18]	1.10 [1.00; 1.20]	0.00 [-0.07; 0.07]	9.7 [6.1; 15.3]	8.8 [5.5; 13.9]	1.12 [1.05; 1.22]‡	1.11 [1.02; 1.22]‡	-0.01 [-0.08; 0.06]
Lesotho	1.17 [1.12; 1.23]	1.16 [1.09; 1.22]	-0.02 [-0.08; 0.05]	106.5 [81.7; 143.4]	92.3 [70.5; 124.3]	0.99 [0.94; 1.04]	0.98 [0.92; 1.04]	-0.01 [-0.06; 0.05]
Liberia	1.11 [1.06; 1.15]	1.16 [1.10; 1.22]	0.05 [-0.01; 0.12]	80.2 [59.5; 107.5]	69.1 [51.3; 92.6]	0.99 [0.95; 1.03]	0.99 [0.94; 1.06]	0.00 [-0.05; 0.06]
Libya	1.19 [1.12; 1.27]	1.24 [1.15; 1.33]	0.04 [-0.03; 0.12]	16.9 [13.9; 20.6]	13.7 [11.2; 16.7]	1.02 [0.96; 1.10]	1.01 [0.94; 1.08]	-0.02 [-0.08; 0.05]
Lithuania	1.26 [1.23; 1.30]	1.20 [1.15; 1.26]	-0.06 [-0.12; 0.00]	5.9 [5.2; 6.5]	4.9 [4.4; 5.4]	0.99 [0.96; 1.02]	1.00 [0.95; 1.05]	0.01 [-0.04; 0.06]
Luxembourg	1.22 [1.15; 1.30]	1.20 [1.12; 1.28]	-0.02 [-0.10; 0.05]	2.4 [1.9; 3.1]	2.0 [1.6; 2.6]	1.00 [0.94; 1.06]	1.00 [0.93; 1.07]	0.00 [-0.06; 0.06]
Macedonia*	1.11 [1.08; 1.14]	1.13 [1.08; 1.19]	0.03 [-0.03; 0.09]	7.9 [6.5; 9.2]	6.9 [5.7; 8.1]	1.12 [1.09; 1.15]‡	1.07 [1.02; 1.12]‡	-0.05 [-0.11; 0.01]
Madagascar	1.09 [1.06; 1.13]	1.16 [1.10; 1.21]	0.06 [0.00; 0.12]§	62.3 [43.6; 87.9]	54.0 [37.7; 75.9]	1.00 [0.97; 1.03]	1.01 [0.95; 1.07]	0.01 [-0.05; 0.07]
Malawi	1.09 [1.06; 1.11]	1.14 [1.09; 1.19]	0.06 [0.00; 0.11]§	75.5 [59.9; 98.2]	66.2 [52.4; 86.0]	1.00 [0.97; 1.03]	0.99 [0.95; 1.05]	0.00 [-0.05; 0.05]
Malaysia	1.25 [1.14; 1.36]	1.22 [1.12; 1.33]	-0.03 [-0.11; 0.05]	9.3 [8.2; 10.4]	7.6 [6.7; 8.6]	1.00 [0.92; 1.09]	1.00 [0.92; 1.09]	0.00 [-0.06; 0.06]
Maldives	1.13 [1.06; 1.20]	1.23 [1.15; 1.32]	0.10 [0.03; 0.18]§	11.5 [10.2; 13.1]	9.4 [8.3; 10.6]	1.00 [0.94; 1.07]	1.00 [0.94; 1.07]	0.00 [-0.06; 0.06]
Mali	1.08 [1.05; 1.10]	1.10 [1.05; 1.14]	0.02 [-0.03; 0.07]	133.7 [94.8; 184.8]	122.0 [86.4; 169.0]	1.00 [0.97; 1.03]	1.01 [0.96; 1.06]	0.01 [-0.04; 0.06]
Malta	1.21 [1.15; 1.29]	1.19 [1.11; 1.27]	-0.03 [-0.10; 0.05]	7.3 [6.1; 8.8]	6.2 [5.1; 7.4]	1.02 [0.96; 1.08]	1.02 [0.96; 1.09]	0.00 [-0.06; 0.06]
Marshall Islands	1.23 [1.14; 1.35]	1.27 [1.18; 1.40]	0.04 [-0.03; 0.12]	42.3 [32.8; 53.4]	33.2 [25.8; 42.0]	0.98 [0.89; 1.06]	0.96 [0.87; 1.04]	-0.01 [-0.07; 0.05]
Mauritania*	1.16 [1.11; 1.21]	1.21 [1.15; 1.28]	0.05 [-0.01; 0.12]	92.0 [63.2; 132.8]	75.7 [57.2; 110.2]	0.95 [0.91; 1.02]‡	0.95 [0.89; 1.01]	0.00 [-0.06; 0.06]
Mauritius	1.29 [1.25; 1.33]	1.25 [1.19; 1.32]	-0.04 [-0.10; 0.03]	16.8 [14.3; 19.6]	13.4 [11.4; 15.7]	1.07 [0.94; 1.01]	1.00 [0.95; 1.04]	0.02 [-0.03; 0.08]
Mexico	1.18 [1.12; 1.23]	1.22 [1.19; 1.25]	0.04 [-0.02; 0.10]	17.7 [17.1; 18.3]	14.6 [14.1; 15.0]	1.03 [0.98; 1.08]	1.03 [1.00; 1.05]‡	0.00 [-0.05; 0.06]
Republic of Moldova	1.25 [1.16; 1.35]	1.26 [1.16; 1.37]	0.01 [-0.07; 0.09]	19.6 [14.1; 28.4]	15.5 [11.2; 22.6]	0.99 [0.91; 1.07]	0.99 [0.91; 1.07]	0.00 [-0.06; 0.06]
Monaco	1.21 [1.11; 1.32]	1.20 [1.10; 1.30]	-0.01 [-0.08; 0.06]	4.1 [3.6; 4.7]	3.5 [3.0; 4.0]	1.00 [0.92; 1.09]	1.00 [0.92; 1.09]	0.00 [-0.06; 0.06]
Mongolia* †	1.34 [1.27; 1.42]	1.48 [1.36; 1.62]	0.14 [0.03; 0.25]§	32.6 [22.7; 45.3]	22.0 [15.2; 30.5]	0.83 [0.79; 0.88]‡	0.84 [0.77; 0.92]‡	0.00 [-0.06; 0.07]
Montenegro*	1.14 [1.08; 1.21]	1.13 [1.05; 1.22]	-0.01 [-0.08; 0.06]	6.3 [5.3; 7.4]	5.5 [4.7; 6.5]	1.09 [1.04; 1.16]‡	1.06 [1.04; 1.14]	-0.03 [-0.10; 0.04]
Morocco	1.13 [1.09; 1.18]	1.24 [1.17; 1.32]	0.11 [0.03; 0.18]§	34.3 [28.9; 40.2]	27.7 [23.2; 32.6]	1.02 [0.98; 1.06]	1.00 [0.94; 1.07]	-0.02 [-0.08; 0.04]
Mozambique	1.08 [1.05; 1.12]	1.11 [1.06; 1.16]	0.03 [-0.02; 0.08]	94.4 [80.8; 111.1]	84.8 [72.7; 100.1]	1.01 [0.98; 1.05]	1.02 [0.97; 1.06]	0.00 [-0.04; 0.05]
Myanmar	1.16 [1.09; 1.23]	1.22 [1.14; 1.31]	0.06 [0.01; 0.13]	57.4 [42.8; 75.3]	47.0 [35.2; 61.7]	0.97 [0.91; 1.03]	0.98 [0.90; 1.05]	0.00 [-0.06; 0.07]
Namibia	1.15 [1.09; 1.21]	1.22 [1.15; 1.30]	0.07 [0.01; 0.14]§	42.5 [30.1; 60.5]	34.7 [24.6; 49.6]	0.99 [0.93; 1.04]	0.98 [0.92; 1.05]	0.00 [-0.07; 0.06]
Nauru	1.18 [1.09; 1.28]	1.23 [1.13; 1.34]	0.05 [-0.02; 0.12]	40.8 [27.6; 58.7]	33.1 [22.5; 47.6]	1.00 [0.91; 1.10]	1.00 [0.90; 1.09]	0.00 [-0.08; 0.07]
Nepal* †	1.01 [0.98; 1.05]	1.03 [1.07; 1.19]	0.12 [0.06; 0.18]§	44.1 [35.1; 55.2]	39.0 [31.1; 48.8]	1.10 [1.06; 1.14]‡	1.08 [1.02; 1.15]‡	-0.02 [-0.08; 0.05]
Netherlands	1.30 [1.26; 1.33]	1.23 [1.18; 1.28]	-0.07 [-0.12; -0.01]§	4.5 [4.3; 4.7]	3.7 [3.5; 3.8]	0.94 [0.92; 0.97]‡	0.98 [0.94; 1.02]	0.03 [-0.01; 0.08]
New Zealand	1.27 [1.23; 1.31]	1.23 [1.18; 1.29]	-0.04 [-0.10; 0.03]	6.3 [5.7; 7.0]	5.1 [4.6; 5.7]	0.97 [0.94; 1.00]	0.97 [0.93; 1.02]	0.00 [-0.04; 0.05]
Nicaragua	1.18 [1.13; 1.23]	1.26 [1.18; 1.34]	0.08 [0.01; 0.15]§	27.0 [18.6; 40.2]	21.5 [14.7; 32.1]	0.99 [0.94; 1.03]	0.99 [0.93; 1.06]	0.00 [-0.05; 0.07]
Niger*	1.02 [1.00; 1.05]	1.06 [1.02; 1.11]	0.04 [0.01; 0.09]	117.0 [93.3; 144.9]	109.8 [87.6; 135.9]	1.04 [1.01; 1.06]‡	1.03 [0.98; 1.08]	-0.01 [-0.05; 0.04]
Nigeria	1.10 [1.07; 1.13]	1.10 [1.05; 1.14]	0.04 [0.00; 0.05]	129.2 [105.0; 158.2]	118.0 [95.7; 143.9]	0.99 [0.96; 1.02]	1.01 [0.97; 1.05]	0.01 [-0.03; 0.06]
Niue	1.24 [1.14; 1.35]	1.25 [1.15; 1.36]	0.01 [-0.07; 0.08]	27.8 [14.9; 50.7]	22.3 [11.9; 40.5]	1.00 [0.92; 1.09]	0.99 [0.91; 1.08]	-0.01 [-0.07; 0.06]
Norway	1.28 [1.24; 1.33]	1.26 [1.20; 1.32]	-0.02 [-0.09; 0.04]	3.1 [2.7; 3.5]	2.5 [2.2; 2.8]	0.95 [0.92; 0.99]‡	0.95 [0.91; 1.00]‡	0.00 [-0.05; 0.05]
Oman	1.20 [1.12; 1.29]	1.22 [1.13; 1.32]	0.02 [-0.05; 0.10]	12.7 [11.8; 13.8]	10.4 [9.6; 11.3]	1.02 [0.95; 1.10]	1.01 [0.94; 1.09]	-0.01 [-0.07; 0.05]
Pakistan* †	1.03 [1.00; 1.07]	1.09 [1.04; 1.15]	0.06 [0.01; 0.12]§	89.6 [75.5; 103.9]	81.9 [71.0; 95.0]	1.09 [1.05; 1.12]‡	1.06 [1.01; 1.12]‡	-0.03 [-0.08; 0.03]
Palau	1.24 [1.26; 1.30]	1.23 [1.14; 1.33]	-0.01 [-0.10; -0.04]§	22.8 [14.6; 35.6]	18.6 [11.9; 29.1]	1.00 [0.91; 1.09]	1.00 [0.93; 1.06]	0.00 [-0.05; 0.07]
Portugal	1.26 [1.23; 1.29]	1.20 [1.15; 1.25]	-0.06 [-0.11; 0.00]§	4.0 [3.7; 4.3]	3.3 [3.1; 3.6]	0.98 [0.96; 1.00]‡	1.00 [0.96; 1.04]	0.01 [-0.03; 0.06]
Qatar	1.19 [1.12; 1.26]	1.15 [1.08; 1.22]	-0.04 [-0.11; 0.03]	7.9 [6.8; 9.1]	6.9 [5.9; 8.0]	1.05 [0.99; 1.12]	1.06 [0.99; 1.12]	0.00 [-0.06; 0.06]
Romania	1.24 [1.22; 1.25]	1.25 [1.21; 1.29]	0.01 [-0.03; 0.06]	13.5 [11.8; 15.4]	10.8 [9.5; 12.3]	1.09 [0.98; 1.		

Table 7 – continued from previous page

	Sex ratio U5MR			Sex-specific U5MR in 2012 (per 1,000)		Estimated/Expected female U5MR		
	1990	2012	Change 1990–2012	Male	Female	1990	2012	Change 1990–2012
Sweden	1.24 [1.21; 1.28]	1.20 [1.15; 1.26]	-0.04 [-0.10; 0.02]	3.2 [3.0; 3.4]	2.6 [2.5; 2.8]	0.97 [0.94; 1.00]	1.00 [0.95; 1.04]	0.02 [-0.02; 0.07]
Switzerland	1.27 [1.23; 1.31]	1.20 [1.14; 1.26]	-0.07 [-0.13; 0.00]§	4.7 [4.3; 5.1]	3.9 [3.6; 4.3]	0.96 [0.93; 0.99]‡	1.00 [0.95; 1.05]	0.04 [-0.01; 0.09]
Syria	1.19 [1.13; 1.25]	1.22 [1.15; 1.30]	0.03 [-0.04; 0.11]	16.5 [13.4; 20.7]	13.5 [10.9; 17.0]	1.03 [0.98; 1.09]	1.02 [0.96; 1.08]	-0.02 [-0.08; 0.05]
Tajikistan	1.18 [1.12; 1.24]	1.23 [1.15; 1.31]	0.05 [-0.02; 0.12]	64.1 [32.3; 125.0]	52.3 [26.3; 102.2]	0.97 [0.91; 1.01]	0.97 [0.89; 1.05]	0.00 [-0.07; 0.08]
Tanzania	1.09 [1.05; 1.12]	1.15 [1.09; 1.21]	0.06 [-0.00; 0.12]§	57.6 [44.1; 75.7]	50.2 [38.4; 66.1]	1.01 [0.97; 1.04]	1.02 [0.96; 1.08]	0.01 [-0.05; 0.07]
Thailand*	1.31 [1.24; 1.38]	1.31 [1.22; 1.41]	0.00 [-0.08; 0.08]	14.9 [10.4; 21.7]	11.4 [7.9; 16.5]	0.93 [0.88; 0.99]‡	0.95 [0.88; 1.02]	0.01 [-0.04; 0.07]
Timor Leste	1.11 [1.05; 1.17]	1.19 [1.12; 1.27]	0.09 [0.02; 0.16]§	61.6 [45.0; 81.5]	51.7 [37.6; 68.2]	1.00 [0.95; 1.06]	1.00 [0.93; 1.07]	0.00 [-0.06; 0.07]
Togo	1.13 [1.09; 1.17]	1.15 [1.10; 1.21]	0.02 [-0.03; 0.08]	102.1 [78.0; 133.1]	88.6 [67.8; 115.9]	0.97 [0.93; 1.01]	0.97 [0.92; 1.02]	0.00 [-0.05; 0.05]
Tonga	1.25 [1.15; 1.37]	1.24 [1.14; 1.36]	-0.01 [-0.09; 0.07]	14.2 [8.2; 24.4]	11.4 [6.6; 19.7]	1.00 [0.92; 1.09]	1.00 [0.91; 1.09]	0.00 [-0.07; 0.06]
Trinidad and Tobago	1.21 [1.13; 1.30]	1.23 [1.14; 1.33]	0.02 [-0.06; 0.10]	22.8 [23.1; 40.2]	18.5 [10.8; 32.7]	1.03 [0.95; 1.10]	1.01 [0.94; 1.09]	-0.01 [-0.08; 0.06]
Tunisia	1.13 [1.07; 1.19]	1.19 [1.11; 1.27]	0.06 [-0.01; 0.13]	17.4 [14.7; 20.6]	14.6 [12.3; 17.4]	1.06 [1.00; 1.12]	1.05 [0.98; 1.12]	-0.01 [-0.07; 0.06]
Turkey	1.12 [1.07; 1.17]	1.22 [1.14; 1.30]	0.10 [0.03; 0.18]§	15.6 [10.4; 23.0]	12.8 [8.5; 18.9]	1.03 [0.98; 1.08]	1.02 [0.96; 1.09]	-0.01 [-0.07; 0.05]
Turkmenistan*	1.27 [1.16; 1.50]	1.32 [1.20; 1.60]	0.05 [-0.03; 0.15]	60.4 [32.9; 103.0]	45.0 [24.1; 76.9]	0.90 [0.76; 0.99]‡	0.90 [0.75; 1.01]	0.00 [-0.06; 0.07]
Tuvalu	1.15 [1.02; 1.24]	1.22 [1.10; 1.33]	0.08 [0.00; 0.15]§	32.5 [22.4; 48.1]	26.7 [18.4; 39.6]	1.03 [0.95; 1.17]	1.02 [0.93; 1.13]	-0.02 [-0.09; 0.05]
Uganda* †	1.15 [1.11; 1.19]	1.20 [1.15; 1.26]	0.05 [0.00; 0.11]	75.1 [62.4; 92.1]	62.3 [51.9; 76.4]	0.95 [0.92; 0.98]‡	0.94 [0.90; 0.99]‡	-0.01 [-0.05; 0.04]
Ukraine*	1.33 [1.31; 1.35]	1.27 [1.24; 1.31]	-0.06 [-0.10; -0.02]§§	12.0 [11.1; 13.0]	9.4 [8.7; 10.2]	0.94 [0.92; 0.96]‡	0.97 [0.94; 1.00]‡	0.03 [0.00; 0.06]
United Arab Emirates	1.27 [1.19; 1.36]	1.24 [1.15; 1.34]	-0.04 [-0.11; 0.04]	9.3 [8.1; 10.6]	7.5 [6.5; 8.6]	0.98 [0.92; 1.05]	0.99 [0.91; 1.06]	0.01 [-0.05; 0.07]
United Kingdom	1.29 [1.27; 1.31]	1.22 [1.19; 1.26]	-0.06 [-0.11; -0.02]§§	5.3 [5.0; 5.5]	4.3 [4.1; 4.5]	0.95 [0.93; 0.97]‡	0.98 [0.95; 1.01]	0.03 [-0.01; 0.06]
United States of America	1.25 [1.24; 1.26]	1.21 [1.17; 1.25]	-0.04 [-0.08; 0.00]§	7.8 [6.8; 8.9]	6.4 [5.6; 7.4]	0.99 [0.97; 1.00]‡	1.00 [0.97; 1.03]	0.02 [-0.02; 0.05]
Uruguay	1.25 [1.22; 1.28]	1.20 [1.15; 1.26]	-0.05 [-0.11; 0.02]	7.8 [5.4; 11.0]	6.5 [4.5; 9.2]	1.00 [0.97; 1.03]	1.01 [0.96; 1.06]	0.01 [-0.05; 0.06]
Uzbekistan* †	1.27 [1.20; 1.36]	1.33 [1.23; 1.44]	0.06 [-0.02; 0.14]	45.0 [23.9; 76.8]	33.9 [17.9; 57.6]	0.92 [0.86; 0.98]‡	0.92 [0.84; 1.00]‡	0.00 [-0.06; 0.07]
Vanuatu	1.22 [1.12; 1.32]	1.23 [1.13; 1.34]	0.02 [-0.06; 0.09]	19.7 [10.7; 36.2]	16.0 [8.7; 29.5]	1.01 [0.93; 1.11]	1.01 [0.93; 1.10]	0.00 [-0.07; 0.06]
Venezuela (Bolivarian Republic of)	1.27 [1.17; 1.38]	1.27 [1.17; 1.39]	0.00 [-0.08; 0.08]	17.0 [15.7; 18.5]	13.4 [12.2; 14.7]	0.98 [0.90; 1.06]	0.99 [0.90; 1.07]	0.00 [-0.06; 0.06]
Vietnam*	1.24 [1.18; 1.31]	1.30 [1.22; 1.39]	0.06 [-0.01; 0.14]	25.9 [24.5; 27.4]	19.9 [18.7; 21.2]	0.95 [0.90; 1.00]‡	0.96 [0.90; 1.02]	0.01 [-0.04; 0.07]
Yemen	1.09 [1.05; 1.13]	1.16 [1.10; 1.22]	0.07 [0.01; 0.13]§	64.3 [44.6; 91.1]	55.4 [38.6; 78.5]	1.02 [0.99; 1.06]	1.02 [0.95; 1.09]	-0.01 [-0.07; 0.06]
Zambia	1.10 [1.07; 1.13]	1.14 [1.08; 1.19]	0.04 [-0.02; 0.09]	94.0 [63.2; 148.7]	83.0 [55.5; 130.5]	0.99 [0.96; 1.02]	0.98 [0.93; 1.04]	-0.01 [-0.06; 0.05]
Zimbabwe	1.19 [1.14; 1.24]	1.16 [1.10; 1.22]	-0.03 [-0.09; 0.03]	96.1 [74.1; 128.2]	83.1 [64.0; 111.1]	0.96 [0.91; 1.00]	0.96 [0.91; 1.02]	0.01 [-0.04; 0.06]

\* : Sex ratio is outlying in 1990. †: Sex ratio is outlying in 2012. ‡: Ratio of estimated to expected female mortality is significantly different from one. §: Change is significantly different from zero.

**Table 8: Estimates and 90% uncertainty intervals for excess female infants deaths, excess female IMR, and the percentage of excess female deaths among all infant deaths in 1990 and 2012 for the world, MDG regions, and all countries.**

	Excess female deaths IMR		% of deaths IMR		Excess female IMR (per 1,000)	
	1990	2012	1990	2012	1990	2012
World	184,000 [124,000; 246,000]	117,000 [ 86,000; 149,000]	2.10	2.40	2.8 [ 1.9; 3.8]	1.8 [ 1.3; 2.3]
Developed regions	-2,810 [-3,670; -1,980]	-197 [-70; 390]	-1.50	-0.30	-0.4 [-0.5; -0.3]	0.0 [-0.1; 0.1]
Northern Africa	6,830 [4,520; 9,130]	1,980 [1,100; 2,850]	3.30	2.60	4.0 [2.6; 5.3]	1.0 [0.6; 1.5]
Sub-Saharan Africa	-4,930 [-21,200; 11,500]	-4,700 [-25,300; 15,700]	-0.20	-0.20	-0.5 [-2.2; 1.2]	-0.3 [-1.6; 1.0]
Eastern Asia	54,200 [12,100; 1e+05]	7,570 [ 1,120; 15,000]	4.00	3.20	3.7 [ 0.8; 6.8]	0.8 [ 0.1; 1.7]
Southern Asia	146,000 [113,000; 181,000]	118,000 [ 97,000; 139,000]	4.30	7.10	8.4 [ 6.5; 10.4]	7.0 [ 5.7; 8.2]
South-eastern Asia	-11,800 [-19,300; -4,800]	-3,810 [-8,500; 670]	-1.90	-1.40	-2.1 [-3.5; -0.9]	-0.7 [-1.6; 0.1]
Western Asia	2,240 [-420; 4,910]	851 [-757; 2,370]	1.10	0.90	1.2 [-0.2; 2.6]	0.4 [-0.3; 1.0]
Caucasus and Central Asia	-3,780 [-6,140; -1,720]	-1,450 [-3,400; -260]	-3.10	-2.50	-4.1 [-6.6; -1.8]	-1.7 [-4.1; -0.3]
Latin America and the Caribbean	-2,800 [-9,400; 3,600]	-459 [-2,190; 1,280]	-0.60	-0.30	-0.5 [-1.7; 0.7]	-0.1 [-0.4; 0.2]
Oceania	-1 [-410; 408]	-1 [-518; 447]	0.00	0.00	0.0 [ 4.7; 4.6]	0.0 [ 4.2; 3.6]
Afghanistan	1,590 [-190; 3,460]	1,980 [-170; 4,240]	2.40	2.70	5.5 [-0.6; 11.9]	3.8 [-0.3; 8.1]
Albania	51 [-70; 184]	10 [-10; 40]	1.60	1.60	1.1 [-1.5; 4.1]	0.5 [-0.6; 1.9]
Algeria	107 [-406; 622]	-36 [-495; 412]	0.30	-0.20	0.3 [-1.0; 1.5]	-0.1 [-1.0; 0.8]
Andorra	0 [0; 0]	0 [0; 0]	-0.10	0.10	0.0 [-0.6; 0.6]	0.0 [-0.2; 0.2]
Angola	-301 [-2,860; 2,140]	-235 [-4,760; 3,420]	-0.50	-0.30	-1.1 [-10.4; 7.7]	-0.5 [-9.7; 7.1]
Antigua and Barbuda	0 [0; 0]	0 [0; 0]	0.00	0.10	0.0 [-1.6; 1.7]	0.0 [-0.7; 0.8]
Argentina	-39 [-184; 109]	37 [-100; 171]	-0.20	0.40	-0.1 [-0.5; 0.3]	0.1 [-0.3; 0.5]
Armenia	-18 [-134; 99]	0 [0; 0]	-0.50	0.00	-0.4 [-3.3; 2.5]	0.0 [-1.1; 1.1]
Australia	-30 [-50; -10]	-39 [-64; -14]	-1.60	-2.90	-0.2 [-0.4; -0.1]	-0.2 [-0.4; -0.1]
Austria	-7 [-17; 2]	-5 [-11; 2]	-1.20	-1.70	-0.2 [-0.4; 0.1]	-0.1 [-0.3; 0.0]
Azerbaijan	23 [-393; 438]	170 [20; 340]	0.20	3.20	0.2 [-3.8; 4.2]	2.1 [ 0.2; 4.2]
Bahamas	4 [1; 6]	3 [0; 6]	3.50	3.00	1.4 [ 0.4; 2.5]	0.9 [-0.1; 1.9]
Bahrain	23 [17; 31]	11 [6; 18]	8.20	6.80	3.2 [ 2.3; 4.2]	1.1 [ 0.6; 1.8]
Bangladesh	3,620 [-2,420; 9,590]	2,290 [-190; 4,700]	1.00	2.20	1.9 [-1.3; 5.0]	1.5 [-0.1; 3.1]
Barbados	1 [-1; 3]	1 [0; 4]	1.60	2.30	0.5 [-0.3; 1.3]	0.8 [-0.3; 2.0]
Belarus	-75 [-101; -50]	-14 [-23; -5]	-3.60	-3.30	-1.0 [-1.3; -0.7]	-0.3 [-0.5; -0.1]
Belgium	-31 [-44; -18]	-10 [-20; 0]	-3.20	-2.40	-0.5 [-0.8; -0.3]	-0.2 [-0.3; 0.0]
Belize	1 [-7; 9]	1 [-3; 5]	0.30	0.50	0.2 [-2.2; 2.7]	0.2 [-0.8; 1.2]
Benin	224 [-298; 732]	264 [-403; 887]	0.90	1.30	1.9 [-2.5; 6.2]	1.5 [-2.2; 4.9]
Bhutan	19 [-47; 82]	2 [-18; 21]	1.00	0.40	1.7 [-4.3; 7.6]	0.3 [-2.5; 2.9]
Bolivia (Plurinational State of)	-28 [-428; 365]	3 [-27; 256]	-0.10	0.00	-0.2 [-3.5; 2.9]	0.0 [-2.1; 2.0]
Bosnia and Herzegovina	5 [-14; 24]	-1 [-6; 3]	0.40	-0.70	0.1 [-0.4; 0.7]	-0.1 [-0.4; 0.2]
Botswana	-4 [-66; 54]	1 [-107; 70]	-0.20	0.00	-0.2 [-2.8; 2.3]	0.0 [-4.3; 2.9]
Brazil	-2,540 [-8,250; 3,150]	-407 [-1,770; 903]	-1.40	-1.10	-1.4 [-4.6; 1.8]	-0.3 [-1.2; 0.6]
Brunei	0 [0; 0]	0 [0; 0]	0.40	0.40	0.1 [-0.5; 0.7]	0.1 [-0.4; 0.5]
Bulgaria	-19 [-45; 7]	2 [-12; 16]	-0.90	0.30	-0.3 [-0.8; 0.1]	0.1 [-0.4; 0.5]
Burkina Faso	24 [-828; 868]	152 [-1,110; 1,380]	0.10	0.40	0.1 [-4.0; 4.2]	0.5 [-3.3; 4.1]
Burundi	-749 [-1,620; 64]	-531 [-1,840; 466]	-2.80	-1.90	-5.3 [-1.3; 0.5]	-2.4 [-8.2; 2.1]
Cambodia	-438 [-1,060; 169]	-175 [-829; 163]	-1.60	-1.40	-2.6 [-6.2; 1.0]	-1.0 [-4.5; 0.9]
Cameroun	-539 [-1,610; 450]	-320 [-2,310; 1,180]	-1.20	-0.70	-2.0 [-5.9; 1.7]	-0.8 [-5.6; 3.0]
Canada	-23 [-55; 8]	21 [-16; 58]	-0.90	1.10	-0.1 [-0.3; 0.0]	0.1 [-0.1; 0.3]
Cape Verde	-1 [-29; 28]	0 [0; 0]	-0.10	-0.10	-0.1 [-4.1; 4.0]	0.0 [-1.6; 1.5]
Central African Republic	33 [-321; 387]	19 [-497; 497]	0.20	0.10	0.5 [-5.2; 6.3]	0.2 [-6.2; 6.3]
Chad	58 [-742; 869]	-158 [-1,890; 1,530]	0.20	-0.30	0.4 [-4.9; 5.7]	-0.5 [-6.5; 5.3]
Chile	70 [20; 120]	11 [-26; 52]	1.50	0.60	0.5 [ 0.1; 0.8]	0.1 [-0.2; 0.4]
China	54,600 [12,500; 1e+05]	7,670 [1,260; 15,100]	4.10	3.40	3.6 [ 0.8; 6.6]	0.9 [ 0.1; 1.7]
Colombia	-269 [-907; 354]	-109 [-542; 316]	-1.00	-0.80	-0.6 [-2.0; 0.8]	-0.2 [-1.2; 0.7]
Comoros	3 [-43; 50]	2 [-71; 60]	0.20	0.10	0.4 [-5.9; 6.8]	0.2 [-5.5; 4.7]
Congo	-14 [-209; 185]	10 [-420; 390]	-0.30	0.10	-0.3 [-4.6; 4.1]	0.1 [-4.9; 4.6]
Democratic Republic of the Congo	1,900 [-1,300; 7,100]	-388 [-1,10; 90,900]	1.10	-0.10	2.2 [-3.9; 8.4]	-0.3 [-7.0; 6.3]
Cook Islands	0 [0; 0]	0 [0; 0]	-0.20	0.00	-0.1 [-1.6; 1.5]	0.0 [-0.7; 0.7]
Costa Rica	-5 [-22; 11]	2 [-11; 16]	-0.40	0.30	-0.1 [-0.5; 0.3]	0.1 [-0.3; 0.4]
Cote d'Ivoire	-731 [-2,070; 579]	-511 [-2,630; 1,370]	-1.40	-0.90	-2.9 [-8.0; 2.3]	-1.4 [-7.1; 3.7]
Croatia	-9 [-19; 11]	1 [-3; 6]	-1.40	0.80	-0.3 [-0.7; 0.0]	0.1 [-0.1; 0.3]
Cuba	-56 [-80; -32]	-7 [-17; 2]	-2.80	-1.70	-0.6 [-0.9; -0.3]	-0.1 [-0.3; 0.0]
Cyprus	1 [-3; 4]	0 [0; 0]	0.40	0.40	0.1 [-0.4; 0.6]	0.0 [-0.1; 0.2]
Czech Republic	-48 [-73; -23]	-9 [-18; -11]	-2.50	-2.50	-0.6 [-1.0; -0.3]	-0.2 [-0.3; 0.0]
Denmark	-11 [-19; -3]	-1 [-6; 4]	-2.20	-0.60	-0.3 [-0.6; -0.1]	0.0 [-0.2; 0.1]
Djibouti	21 [-81; 130]	16 [-55; 81]	0.80	1.00	1.5 [-5.6; 9.0]	1.3 [-4.4; 6.7]
Dominica	0 [0; 0]	0 [0; 0]	2.60	2.30	0.8 [-0.2; 1.8]	0.5 [-0.3; 1.5]
Dominican Republic	93 [-145; 332]	48 [-113; 212]	1.00	1.00	0.9 [-1.4; 3.1]	0.4 [-1.1; 2.0]
Ecuador	-251 [-731; 195]	-101 [-378; 133]	-1.90	-1.60	-1.6 [-4.7; 1.3]	-0.6 [-2.3; 0.8]
Egypt	6,470 [4,530; 8,410]	2,050 [1,660; 2,440]	5.70	5.90	6.9 [ 4.9; 9.0]	2.1 [ 1.7; 2.6]
El Salvador	-31 [-338; 257]	-7 [-78; 68]	-0.40	-0.30	-0.4 [-3.9; 3.0]	-0.1 [-1.2; 1.0]
Equatorial Guinea	7 [-77; 91]	2 [-96; 79]	0.30	0.10	0.8 [-8.3; 9.8]	0.2 [-7.1; 6.0]
Eritrea	-227 [-645; 162]	-107 [-448; 187]	-1.80	-1.30	-3.1 [-8.9; 2.2]	-1.0 [-4.0; 1.7]
Estonia	-7 [-15; 0]	-1 [-2; 1]	-1.80	-1.50	-0.6 [-1.3; 0.0]	-0.1 [-0.3; 0.1]
Ethiopia	-8,630 [-14,800; -2,500]	-3,630 [-8,720; 680]	-3.20	-2.60	-7.3 [-12.6; 2.1]	-2.4 [-5.7; 0.4]
Federated States of Micronesia	0 [0; 0]	0 [0; 0]	0.00	-0.30	0.0 [-4.1; 3.9]	-0.2 [-4.3; 2.6]
Fiji	0 [0; 0]	-1 [-13; 10]	-0.10	-0.40	0.0 [-1.8; 1.7]	-0.1 [-1.4; 1.1]
Finland	-3 [-9; 3]	-1 [-5; 2]	-0.90	-1.00	-0.1 [-0.3; 0.1]	0.0 [-0.2; 0.1]
France	-190 [-240; -140]	-50 [-90; -10]	-3.80	-1.90	-0.6 [-0.7; -0.4]	-0.1 [-0.2; 0.0]
Gabon	-44 [-124; 30]	-35 [-132; 46]	-2.10	-1.60	-2.5 [-7.1; 1.7]	-1.3 [-5.0; 1.8]
The Gambia	-10 [-150; 120]	-14 [-170; 135]	-0.30	-0.40	-0.5 [-6.9; 5.8]	-0.4 [-4.5; 3.6]
Georgia	-57 [-174; 44]	-17 [-63; 22]	-2.00	-1.50	-1.2 [-3.8; 1.0]	-0.6 [-2.1; 0.7]
Germany	-174 [-233; -115]	-28 [-69; 12]	-3.00	-1.20	-0.4 [-0.6; -0.3]	-0.1 [-0.2; 0.0]
Ghana	-248 [-1,300; 855]	-267 [-1,620; 922]	-0.60	-0.70	-0.9 [-4.6; 3.0]	-0.7 [-4.1; 2.3]
Greece	27 [11; 43]	9 [-1; 20]	2.30	1.90	0.5 [ 0.2; 0.8]	0.2 [ 0.0; 0.4]
Grenada	2 [-1; 4]	1 [0; 2]	2.80	2.50	1.0 [-0.4; 2.9]	0.6 [-0.3; 1.8]
Guatemala	-24 [-557; 499]	-6 [-454; 414]	-0.10	-0.10	-0.1 [-3.3; 2.9]	0.0 [-1.9; 1.8]
Guinea	289 [-601; 1,220]	52 [-861; 928]	0.80	0.20	2.0 [-4.2; 8.4]	0.2 [-4.0; 4.4]
Guinea-Bissau	-111 [-285; 47]	-95 [-300; 73]	-2.30	-2.00	-5.1 [-13.1; 2.2]	-3.0 [-9.5; 2.4]
Guyana	-34 [-67; -4]	-11 [-33; 61]	-3.70	-2.30	-3.2 [-6.4; 0.4]	-1.3 [-4.1; 0.7]
Haiti	-184 [-788; 437]	-115 [-594; 357]	-0.70	-0.80	-1.4 [-6.1; 3.4]	-0.9 [-4.4; 2.7]
Honduras	-65 [-333; 188]	-27 [-161; 109]	-0.80	-0.70	-0.7 [-3.6; 2.0]	-0.3 [-1.6; 1.1]
Hungary	9 [-21; 39]	7 [-4; 18]	0.40	1.30	0.1 [-0.3; 0.5]	0.1 [-0.1; 0.4]
Iceland	0 [0; 0]	0 [0; 0]	-0.20	-0.30	0.0 [-0.4; 0.3]	0.0 [-0.1; 0.1]
India	126,000 [94,000; 158,000]	108,000 [90,000; 127,000]	5.40	9.80	9.4 [-7.0; 11.7]	8.8 [-7.4; 10.4]
Indonesia	-4,600 [-10,000; 800]	-1,390 [-5,050; 2,120]	-1.60	-1.10	-2.0 [-4.3; 0.3]	-0.6 [-2.1; 0.9]
Iran (Islamic Republic of)	4,740 [2,650; 6,880]	1,060 [350; 1,870]	5.80	4.70	5.0 [ 2.8; 7.3]	1.4 [ 0.5; 2.5]
Iraq	338 [-403; 1,060]	308 [-563; 1,170]	1.20	1.10	1.0 [-1.2; 3.2]	0.6 [-1.1; 2.3]
Ireland	-2 [-8; 5]	-1 [-7; 5]	-0.50	-0.30	-0.1 [-0.3; 0.2]	0.0 [-0.2; 0.1]
Israel	34 [20; 48]	10 [0; 20]	3.40	1.90	0.7 [-0.4; 0.9]	0.1 [ 0.0; 0.3]

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Table 8 – continued from previous page

		Excess female deaths IMR	% of deaths IMR	Excess female IMR (per 1,000)		
	1990	2012	1990	2012	1990	2012
Italy	6 [-42; 54]	11 [-23; 44]	0.10	0.60	0.0 [-0.2; 0.2]	0.0 [-0.1; 0.2]
Jamaica	-19 [-74; 35]	-9 [-40; 20]	-1.30	-1.20	-0.6 [-2.6; 1.2]	-0.4 [-1.5; 0.8]
Japan	53 [-5; 110]	64 [24; 102]	1.00	2.70	0.1 [0.0; 0.2]	0.1 [0.0; 0.2]
Jordan	192 [100; 291]	163 [39; 306]	5.80	5.00	3.5 [1.8; 5.3]	1.6 [0.4; 3.1]
Kazakhstan	-683 [-1,370; -82]	-209 [-436; -14]	-3.80	-3.60	-3.4 [-6.9; -0.4]	-1.2 [-2.6; -0.1]
Kenya	881 [-428; 2,230]	502 [-2,120; 2,810]	1.40	0.70	1.7 [-0.8; 4.4]	0.7 [-2.8; 3.7]
Kiribati	0 [0; 0]	0 [0; 0]	0.00	0.00	0.01 [-6.4; 6.1]	0.0 [-4.5; 4.1]
Democratic People's Republic of Korea	1 [-569; 514]	-1 [-365; 351]	0.00	0.00	0.01 [-3.3; 3.0]	0.0 [-2.1; 2.0]
Republic of Korea	210 [170; 250]	21 [-9; 52]	6.10	1.30	0.8 [0.7; 1.0]	0.1 [0.0; 0.2]
Kuwait	16 [6; 24]	16 [2; 30]	2.80	2.50	0.8 [0.3; 1.2]	0.5 [0.1; 0.9]
Kyrgyzstan	-75 [-397; 227]	-28 [-168; 104]	-0.90	-0.80	-1.1 [-5.6; 3.2]	-0.4 [-2.2; 1.4]
Lao People's Democratic Republic	10 [-880; 900]	8 [-463; 457]	0.10	0.10	0.1 [-9.4; 9.6]	0.1 [-4.7; 4.7]
Latvia	-6 [-18; 6]	3 [-1; 7]	-0.80	1.60	-0.3 [-0.8; 0.3]	0.3 [-0.1; 0.7]
Lebanon	109 [47; 187]	25 [4; 62]	6.30	5.20	3.4 [1.5; 5.9]	0.8 [0.1; 2.1]
Lesotho	-10 [-110; 90]	-28 [-192; 119]	-0.30	-0.70	-0.4 [-4.0; 3.4]	-0.9 [-6.4; 4.0]
Liberia	-6 [-408; 404]	11 [-278; 275]	0.00	0.10	-0.1 [-8.2; 8.2]	0.2 [-3.7; 3.7]
Libya	16 [-132; 163]	-3 [-63; 57]	0.40	-0.20	0.3 [-2.3; 2.8]	0.0 [-1.0; 0.9]
Lithuania	-1 [-13; 10]	1 [-3; 4]	-0.20	0.40	-0.1 [-0.5; 0.4]	0.0 [-0.2; 0.3]
Luxembourg	0 [0; 0]	0 [0; 0]	-0.10	0.00	0.01 [-0.5; 0.5]	0.0 [-0.1; 0.1]
Macedonia	57 [41; 75]	4 [0; 8]	5.00	2.70	3.3 [2.3; 4.3]	0.4 [0.0; 0.7]
Madagascar	646 [-551; 1,810]	303 [-737; 1,310]	1.30	1.00	2.3 [-2.0; 6.4]	0.8 [-1.9; 3.4]
Malawi	1,190 [10; 2,400]	197 [-653; 980]	2.00	0.70	5.2 [0.0; 10.5]	0.6 [-2.1; 3.1]
Malaysia	1 [-293; 314]	4 [-151; 166]	0.00	0.10	0.01 [-1.2; 1.3]	0.0 [-0.6; 0.7]
Maldives	1 [-21; 22]	0 [0; 0]	0.10	0.00	0.1 [-4.6; 4.8]	0.0 [-0.6; 0.6]
Mali	-154 [-982; 677]	182 [-1,530; 1,720]	-0.30	0.30	-0.8 [-5.2; 3.6]	0.5 [-4.4; 5.0]
Malta	0 [0; 0]	0 [0; 0]	0.70	0.60	0.1 [-0.4; 0.7]	0.1 [-0.3; 0.5]
Marshall Islands	-1 [-5; 2]	-1 [-3; 1]	-1.50	-1.90	-1.1 [-5.3; 2.2]	-1.2 [-4.5; 1.3]
Mauritania	-189 [-381; 0]	-241 [-560; 47]	-2.90	-2.90	-4.6 [-9.2; 0.0]	-3.7 [-8.6; 0.7]
Mauritius	-8 [-15; -1]	-1 [-6; 3]	-2.10	-0.80	-0.8 [-1.5; -0.1]	-0.2 [-0.8; 0.4]
Mexico	664 [-1,750; 2,980]	320 [-100; 730]	0.70	1.00	0.5 [-1.4; 2.4]	0.3 [-0.1; 0.6]
Republic of Moldova	-13 [-108; 74]	-3 [-30; 24]	-0.60	-0.40	-0.3 [-2.5; 1.7]	-0.1 [-1.4; 1.1]
Monaco	0 [0; 0]	0 [0; 0]	0.10	0.00	0.01 [-0.5; 0.6]	0.0 [-0.3; 0.3]
Mongolia	-570 [-860; -230]	-123 [-234; -33]	-10.10	-8.00	-14.9 [-22.3; -5.9]	-3.7 [-7.0; -1.0]
Montenegro	7 [3; 11]	1 [0; 3]	4.10	2.70	1.3 [0.5; 2.2]	0.3 [0.0; 0.7]
Morocco	91 [-911; 1,060]	-61 [-694; 553]	0.20	-0.30	0.3 [-2.6; 3.0]	-0.2 [-1.9; 1.5]
Mozambique	2,110 [160; 4,080]	1,220 [-450; 2,840]	2.40	2.10	6.8 [0.5; 13.1]	2.5 [-0.9; 5.9]
Myanmar	-1,440 [-4,570; 1,540]	-510 [-2,330; 940]	-1.80	-1.30	-2.6 [-8.3; 2.8]	-1.1 [-4.9; 2.0]
Namibia	5 [-74; 87]	-4 [-70; 54]	0.20	-0.30	0.2 [-2.8; 3.3]	-0.1 [-2.4; 1.8]
Nauru	0 [0; 0]	0 [0; 0]	0.00	-0.10	0.01 [-4.7; 4.1]	0.1 [-3.1; 2.7]
Nepal	1,390 [-20; 2,840]	424 [-173; 1,030]	2.10	2.20	4.0 [-0.1; 8.1]	1.5 [-0.6; 3.6]
Netherlands	-36 [-54; -19]	-6 [-18; 6]	-2.90	-1.00	-0.4 [-0.6; -0.2]	-0.1 [-0.2; 0.1]
New Zealand	-7 [-16; 2]	-4 [-11; 3]	-1.30	-1.30	-0.2 [-0.5; 0.1]	-0.1 [-0.4; 0.1]
Nicaragua	-22 [-205; 160]	-5 [-105; 92]	-0.30	-0.20	-0.3 [-2.8; 2.2]	-0.1 [-1.5; 1.3]
Niger	768 [-325; 1,900]	718 [-835; 2,290]	1.40	1.40	3.7 [-1.5; 9.1]	1.7 [-2.0; 5.5]
Nigeria	-2,580 [-13,200; 7,590]	-368 [-15,400; 13,500]	-0.50	-0.10	-1.2 [-6.2; 3.6]	-0.1 [-4.4; 3.9]
Niue	0 [0; 0]	0 [0; 0]	0.00	-0.20	0.01 [-1.0; 1.1]	-0.1 [-2.3; 1.8]
Norway	-8 [-15; 0]	-3 [-7; 1]	-1.90	-2.20	-0.3 [-0.5; 0.0]	-0.1 [-0.2; 0.0]
Orman	8 [-75; 89]	2 [-27; 31]	0.40	0.30	0.21 [-2.2; 2.6]	0.1 [-0.7; 0.8]
Pakistan	9,080 [-520; 18,300]	4,060 [-5,590; 13,800]	1.90	1.20	3.9 [-0.2; 7.8]	1.7 [-2.3; 5.7]
Palau	0 [0; 0]	0 [0; 0]	-0.20	-0.20	-0.1 [-2.9; 2.6]	-0.1 [-1.4; 1.3]
Panama	2 [-67; 71]	-1 [-49; 51]	0.10	-0.10	0.1 [-2.1; 2.1]	0.0 [-1.3; 1.4]
Papua New Guinea	-3 [-41; 408]	2 [-516; 450]	0.00	0.00	0.01 [-6.0; 5.9]	0.0 [-4.9; 4.3]
Paraguay	48 [-124; 230]	21 [-90; 139]	1.00	0.70	0.7 [-1.8; 3.4]	0.3 [-1.1; 1.8]
Peru	120 [-610; 820]	44 [-199; 304]	0.30	0.50	0.41 [-1.8; 2.4]	0.1 [-0.7; 1.0]
Philippines	-2,270 [-4,300; -250]	-874 [-2,850; 751]	-2.70	-1.60	-2.2 [-4.2; -0.2]	-0.8 [-2.5; 0.7]
Poland	-61 [-129; 8]	4 [-27; 35]	-0.80	0.20	-0.2 [-0.5; 0.0]	0.0 [-0.1; 0.2]
Portugal	-1 [-17; 16]	1 [-5; 7]	0.00	0.50	0.01 [-0.3; 0.3]	0.0 [-0.1; 0.2]
Qatar	4 [-1; 9]	3 [-1; 8]	2.50	2.60	0.9 [-0.1; 2.0]	0.3 [-0.1; 0.8]
Romania	-58 [-185; 68]	-7 [-47; 35]	-0.40	-0.30	-0.3 [-0.8; 0.3]	-0.1 [-0.4; 0.3]
Russian Federation	-1,680 [-2,020; -1,330]	-114 [-131; 90]	-3.40	-0.80	-1.5 [-1.8; -1.2]	-0.1 [-0.4; 0.1]
Rwanda	425 [-177; 1,030]	204 [-300; 682]	1.40	1.20	2.4 [-1.0; 5.9]	0.9 [-1.3; 3.0]
Saint Kitts and Nevis	0 [0; 0]	0 [0; 0]	0.60	0.50	0.3 [-1.3; 1.9]	0.1 [-0.4; 0.7]
Saint Lucia	0 [0; 0]	0 [0; 0]	-0.30	0.10	-0.1 [-1.1; 0.9]	0.0 [-1.0; 1.1]
Samoa	2 [-3; 7]	1 [-2; 4]	1.60	1.40	0.9 [-1.1; 3.1]	0.4 [-0.7; 1.8]
San Marino	0 [0; 0]	0 [0; 0]	0.00	0.10	0.01 [-0.8; 0.9]	0.0 [-0.3; 0.3]
Sao Tome and Principe	-2 [-12; 9]	-1 [-13; 9]	-0.60	-0.30	-0.8 [-6.0; 4.2]	-0.3 [-3.9; 2.7]
Saudi Arabia	358 [-302; 1,040]	67 [-21; 160]	1.80	1.60	1.2 [-1.0; 3.6]	0.2 [-0.1; 0.6]
Senegal	81 [-134; 512]	-146 [-842; 522]	0.40	-0.60	0.5 [-2.1; 3.1]	-0.6 [-3.3; 2.0]
Serbia	151 [110; 190]	-7 [-18; 5]	4.10	-1.20	2.0 [-1.5; 2.5]	-0.1 [-0.4; 0.1]
Seychelles	1 [0; 1]	0 [0; 0]	2.50	2.20	0.7 [-0.3; 1.9]	0.5 [-0.3; 1.6]
Sierra Leone	-113 [-1,030; 862]	-37 [-1,060; 928]	-0.40	-0.10	-1.2 [-11.9; 9.2]	-0.3 [-9.2; 8.1]
Singapore	1 [-4; 7]	0 [0; 0]	0.40	-0.40	0.01 [-0.2; 0.3]	0.0 [-0.2; 0.1]
Slovakia	-18 [-36; -1]	-2 [-10; 6]	-1.40	-0.60	-0.4 [-0.9; 0.0]	-0.1 [-0.4; 0.2]
Slovenia	-1 [-6; 3]	0 [0; 0]	-0.70	0.00	-0.1 [-0.5; 0.3]	0.0 [-0.2; 0.2]
Solomon Islands	0 [0; 0]	0 [0; 0]	0.00	-0.10	0.01 [-2.9; 2.8]	0.0 [-2.7; 2.3]
Somalia	229 [-986; 1,540]	289 [-1,060; 2,060]	0.70	0.70	1.5 [-6.4; 10.0]	1.2 [-6.7; 8.7]
South Africa	-716 [-2,580; 1,010]	-390 [-1,920; 1,000]	-1.40	-1.10	-1.3 [-4.8; 1.9]	-0.7 [-3.4; 1.8]
South Sudan	27 [-1,960; 2,060]	14 [-1,280; 1,280]	0.10	0.10	0.2 [-13.4; 14.0]	0.1 [-6.4; 6.5]
Spain	10 [-30; 50]	23 [-10; 55]	0.30	1.20	0.1 [-0.1; 0.3]	0.1 [0.0; 0.2]
Sri Lanka	92 [28; 155]	35 [-28; 101]	1.50	1.10	0.6 [0.2; 0.9]	0.2 [-0.1; 0.5]
State of Palestine	129 [37; 233]	79 [-2; 173]	4.30	3.20	3.0 [0.8; 5.3]	1.2 [0.0; 2.7]
Saint Vincent and the Grenadines	1 [0; 3]	1 [0; 2]	2.60	2.20	1.1 [-0.1; 2.3]	0.9 [-0.5; 2.5]
Sudan	-1,260 [-3,050; 530]	-1,040 [-3,200; 910]	-2.00	-1.70	-3.1 [-7.4; 1.3]	-1.7 [-5.2; 1.5]
Suriname	-4 [-19; 9]	-2 [-10; 5]	-1.10	-1.00	-0.9 [-4.4; 2.2]	-0.4 [-2.2; 1.0]
Swaziland	-6 [-73; 57]	-1 [-80; 69]	-0.30	0.00	-0.3 [-3.9; 3.0]	0.1 [-4.2; 3.7]
Sweden	-9 [-20; 2]	0 [0; 0]	-1.30	0.10	-0.1 [-0.3; 0.0]	0.0 [-0.1; 0.1]
Switzerland	-8 [-16; 0]	1 [-7; 8]	-1.60	0.20	-0.2 [-0.4; 0.0]	0.0 [-0.2; 0.2]
Syria	166 [-203; 543]	30 [-180; 250]	1.20	0.50	0.7 [-0.9; 2.4]	0.1 [-0.7; 0.9]
Tajikistan	-354 [-982; 234]	-188 [-1,060; 253]	-1.90	-1.40	-3.1 [-8.6; 2.1]	-1.4 [-7.5; 1.9]
Tanzania	3,010 [590; 5,450]	1,660 [-480; 3,880]	2.70	2.40	5.2 [1.0; 9.4]	1.8 [-0.5; 4.2]
Thailand	-1,180 [-2,230; -180]	-197 [-504; 71]	-3.50	-2.50	-2.2 [-4.1; -0.3]	-0.6 [-1.5; 0.2]
Timor Leste	14 [-107; 138]	5 [-72; 74]	0.40	0.30	1.0 [-7.3; 9.5]	0.2 [-3.4; 3.5]
Togo	-149 [-523; 238]	-198 [-732; 294]	-1.10	-1.30	-1.8 [-6.3; 2.9]	-1.6 [-6.1; 2.4]
Tonga	0 [0; 0]	0 [0; 0]	0.00	-0.10	0.01 [-1.7; 1.7]	0.0 [-1.0; 1.1]
Trinidad and Tobago	6 [-17; 28]	2 [-13; 17]	0.90	0.50	0.5 [-1.6; 2.5]	0.2 [-1.3; 1.7]
Tunisia	138 [-119; 398]	40 [-40; 130]	1.60	1.50	1.3 [-1.1; 3.6]	0.4 [-0.5; 1.4]
Turkey	972 [-1,060; 3,120]	120 [-380; 730]	1.30	0.80	1.4 [-1.5; 4.4]	0.2 [-0.6; 1.1]
Turkmenistan	-538 [-1,540; -36]	-228 [-861; 25]	-5.50	-4.90	-7.7 [-22.2; -0.5]	-4.3 [-15.8; 0.5]
Tuvalu	0 [0; 0]	0 [0; 0]	-0.30	-0.40	-0.3 [-4.1; 3.4]	-0.2 [-2.4; 1.8]
Uganda	306 [-1,600; 2,260]	-469 [-2,620; 1,560]	0.30	-0.70	0.7 [-3.6; 5.1]	-0.6 [-3.4; 2.0]

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Table 8 – continued from previous page

	Excess female deaths IMR		% of deaths IMR		Excess female IMR (per 1,000)	
	1990	2012	1990	2012	1990	2012
Ukraine	-349 [-467; -238]	-66 [-136; 5]	-2.90	-1.30	-1.0 [-1.3; -0.7]	-0.3 [-0.5; 0.0]
United Arab Emirates	-6 [-31; 17]	-6 [-47; 33]	-0.90	-0.60	-0.3 [-1.3; 0.7]	-0.1 [-0.7; 0.5]
United Kingdom	-153 [-214; -93]	-46 [-99; 4]	-2.50	-1.40	-0.4 [-0.6; -0.2]	-0.1 [-0.3; 0.0]
United States of America	-197 [-448; 69]	44 [-377; 490]	-0.50	0.20	-0.1 [-0.2; 0.0]	0.0 [-0.2; 0.2]
Uruguay	-3 [-20; 13]	0 [0; 0]	-0.30	0.10	-0.1 [-0.7; 0.5]	0.0 [-0.3; 0.4]
Uzbekistan	-1,950 [-3,880; -390]	-781 [-2,470; 37]	-4.30	-3.60	-5.2 [-10.2; -1.0]	-2.4 [-7.5; 0.1]
Vanuatu	1 [-5; 8]	0 [0; 0]	0.80	0.40	0.4 [-2.0; 3.1]	0.1 [-1.2; 1.8]
Venezuela (Bolivarian Republic of)	-251 [-880; 299]	-109 [-465; 199]	-1.80	-1.40	-0.9 [-3.0; 1.0]	-0.4 [-1.6; 0.7]
Vietnam	-1,860 [-4,020; 110]	-486 [-1,370; 358]	-2.60	-1.90	-1.9 [-4.0; 0.1]	-0.7 [-2.0; 0.5]
Yemen	-56 [-1,130; 993]	18 [-1,210; 1,060]	-0.10	0.10	-0.2 [-3.8; 3.3]	0.1 [-3.3; 2.9]
Zambia	315 [-553; 1,170]	189 [-1,000; 1,210]	0.80	0.60	1.8 [-3.1; 6.5]	0.6 [-3.3; 4.1]
Zimbabwe	-499 [-1,020; 1]	-591 [-1,560; 234]	-2.70	-2.40	-2.6 [-5.4; 0.0]	-2.7 [-6.9; 1.1]

**Table 9: Estimates and 90% uncertainty intervals for excess female deaths for ages one to five, excess female CMR, and the percentage of excess female deaths among all deaths for ages one to five in 1990 and 2012 for the world, MDG regions, and all countries.**

	Excess female deaths CMR		% of deaths CMR		Excess female CMR (per 1,000)	
	1990	2012	1990	2012	1990	2012
World	194,000 [162,000; 231,000]	59,700 [41,700; 77,400]	5.10	3.30	3.1 [2.6; 3.7]	1.0 [0.7; 1.2]
Developed regions	-548 [-788; -313]	-90 [-210; 30]	-1.50	-0.60	-0.1 [-0.1; 0.0]	0.0 [0.0; 0.0]
Northern Africa	4,090 [3,040; 5,170]	365 [207; 523]	6.50	3.10	2.4 [1.8; 3.0]	0.2 [0.1; 0.3]
Sub-Saharan Africa	-18,200 [-32,300; -4,500]	-8,780 [-23,100; 4,900]	-1.20	-0.80	-2.1 [-3.7; -0.5]	-0.6 [-1.6; 0.3]
Eastern Asia	10,500 [-7,400; 38,000]	875 [-758; 3,460]	3.10	2.30	0.8 [-0.6; 2.8]	0.1 [-0.1; 0.4]
Southern Asia	198,000 [179,000; 217,000]	67,900 [58,200; 78,300]	14.30	14.80	11.9 [10.8; 13.1]	4.1 [3.5; 4.7]
South-eastern Asia	-1,710 [-5,860; 2,240]	-700 [-2,400; 700]	-0.70	-1.00	-0.3 [-1.1; 0.4]	-0.1 [0.4; 0.1]
Western Asia	1,510 [600; 2,970]	301 [-330; 853]	2.30	1.40	0.8 [0.0; 1.6]	0.1 [-0.1; 0.4]
Caucasus and Central Asia	-620 [-1,540; 110]	-239 [-926; 44]	-2.40	-2.70	-0.7 [-1.8; 0.1]	-0.3 [-1.2; 0.1]
Latin America and the Caribbean	652 [-1,680; 2,790]	103 [-317; 492]	0.50	0.30	0.1 [-0.3; 0.5]	0.0 [-0.1; 0.1]
Oceania	4 [-201; 216]	1 [-280; 186]	0.10	0.00	0.0 [-2.3; 2.5]	0.0 [-2.3; 1.5]
Afghanistan	881 [-248; 2,140]	836 [-369; 2,140]	2.90	2.80	3.7 [-1.1; 9.0]	1.7 [-0.7; 4.2]
Albania	-5 [-38; 21]	-1 [-5; 3]	-0.90	-0.80	-0.1 [-0.9; 0.5]	0.0 [-0.3; 0.2]
Algeria	-30 [-160; 100]	28 [-40; 108]	-0.40	1.10	-0.1 [-0.4; 0.2]	0.1 [-0.1; 0.3]
Andorra	0 [0; 0]	0 [0; 0]	-0.10	-0.10	0.0 [-0.2; 0.2]	0.0 [-0.1; 0.1]
Angola	-222 [-2,300; 1,950]	-171 [-3,310; 3,270]	-0.50	-0.30	-1.0 [-1.2; 8.6]	-0.4 [-7.8; 7.5]
Antigua and Barbuda	0 [0; 0]	0 [0; 0]	-0.80	-0.60	-0.1 [-0.5; 0.4]	0.0 [-0.1; 0.1]
Argentina	49 [23; 76]	17 [-41; 38]	2.30	1.60	0.1 [0.1; 0.2]	0.1 [-0.0; 0.1]
Armenia	0 [0; 0]	0 [0; 0]	-0.10	-0.40	0.0 [-1.0; 0.8]	0.0 [-0.2; 0.2]
Australia	-10 [-20; 0]	-5 [-10; 1]	-2.50	-2.10	-0.1 [-0.1; 0.0]	0.0 [-0.1; 0.0]
Austria	-2 [-5; 1]	-1 [-2; 1]	-1.40	-1.10	0.0 [-0.1; 0.0]	0.0 [-0.1; 0.0]
Azerbaijan	-303 [-603; -76]	-49 [-138; -111]	-8.00	-7.10	-3.3 [-6.5; -0.8]	-0.7 [-2.0; -0.2]
Bahamas	0 [0; 0]	0 [0; 0]	1.60	1.20	0.1 [-0.2; 0.5]	0.1 [-0.2; 0.4]
Bahrain	0 [0; 0]	0 [0; 0]	0.00	0.10	0.0 [-0.3; 0.3]	0.0 [-0.1; 0.1]
Bangladesh	13,100 [9,700; 16,700]	1,050 [1,290; 1,790]	7.90	4.30	7.7 [5.7; 9.8]	0.7 [0.2; 1.2]
Barbados	0 [0; 0]	0 [0; 0]	-0.40	-0.40	0.0 [-0.2; 0.1]	0.0 [-0.1; 0.1]
Belarus	-13 [-13; -4]	-4 [-8; -1]	-2.50	-3.10	-0.2 [-0.3; 0.0]	-0.1 [-0.2; 0.0]
Belgium	0 [0; 0]	-1 [-4; 2]	-0.10	-1.20	0.0 [-0.1; 0.1]	0.0 [-0.1; 0.0]
Belize	0 [0; 0]	0 [0; 0]	0.20	0.00	0.0 [-1.0; 1.0]	0.0 [-0.3; 0.3]
Benin	-12 [-408; 391]	56 [-376; 433]	-0.10	0.50	-0.1 [-4.1; 3.9]	0.3 [-2.2; 2.6]
Bhutan	0 [0; 0]	0 [0; 0]	0.00	-0.30	0.0 [-4.5; 4.3]	0.0 [-1.4; 0.9]
Bolivia (Plurinational State of)	64 [-188; 320]	28 [-78; 110]	0.70	1.30	0.6 [-1.7; 3.0]	0.2 [-0.6; 0.9]
Bosnia and Herzegovina	-7 [-13; -1]	-1 [-2; 0]	-4.20	-3.80	-0.2 [-0.4; 0.0]	-0.1 [-0.1; 0.0]
Botswana	8 [-18; 36]	9 [-57; 42]	1.70	1.40	0.4 [-0.8; 1.6]	0.4 [-2.4; 1.8]
Brazil	-315 [-2,410; 1,540]	-32 [-250; 171]	-0.80	-0.70	-0.2 [-1.4; 0.9]	0.0 [-0.2; 0.1]
Brunei	0 [0; 0]	0 [0; 0]	1.10	0.80	0.1 [-0.2; 0.4]	0.0 [-0.1; 0.2]
Bulgaria	2 [-5; 10]	1 [-2; 4]	0.60	0.90	0.0 [-0.1; 0.2]	0.0 [-0.1; 0.1]
Burkina Faso	-5 [-952; 926]	95 [-685; 847]	0.00	0.40	0.0 [-5.2; 5.0]	0.3 [-2.3; 2.8]
Burundi	110 [-500; 730]	97 [-605; 799]	0.70	0.70	0.9 [-4.1; 6.0]	0.5 [-3.2; 4.2]
Cambodia	61 [-350; 478]	-1 [-249; 72]	0.50	0.00	0.3 [-1.9; 2.6]	0.0 [-1.5; 0.4]
Cameroon	-225 [-936; 507]	-315 [-1,620; 604]	-0.90	-1.20	-1.0 [-4.0; 2.2]	-0.9 [-4.4; 1.7]
Canada	-5 [-14; 4]	-3 [-9; 4]	-0.90	-1.00	0.0 [-0.1; 0.0]	0.0 [0.0; 0.0]
Cape Verde	2 [-10; 14]	0 [0; 0]	1.00	0.70	0.3 [-1.5; 2.3]	0.0 [-0.3; 0.5]
Central African Republic	81 [-182; 356]	63 [-208; 378]	1.20	1.10	1.5 [-3.5; 6.7]	0.9 [-3.0; 5.4]
Chad	-313 [-1,080; 454]	-134 [-1,450; 1,260]	-1.20	-0.40	-2.4 [-8.4; 3.5]	-0.5 [-5.7; 4.9]
Chile	-16 [-30; -2]	-2 [-10; 6]	-1.70	-0.60	-0.1 [-0.2; 0.0]	0.0 [-0.1; 0.0]
China	10,600 [-7,200; 38,300]	899 [-722; 3,500]	3.20	2.60	0.8 [-0.6; 2.9]	0.1 [-0.1; 0.4]
Colombia	-18 [-239; 193]	2 [-90; 97]	-0.30	0.10	0.0 [-0.6; 0.5]	0.0 [-0.2; 0.2]
Comoros	-10 [-50; 20]	-6 [-60; 18]	-1.70	-1.20	-1.4 [-6.4; 2.7]	-0.5 [-5.1; 1.6]
Congo	-4 [-155; 137]	-16 [-334; 242]	-0.10	-0.30	-0.1 [-3.9; 3.4]	-0.2 [-4.5; 3.3]
Democratic Republic of the Congo	-1,880 [-6,090; 1,850]	-2,620 [-9,580; 2,750]	-2.10	-2.20	-2.7 [-8.8; 2.7]	-2.2 [-7.8; 2.2]
Cook Islands	0 [0; 0]	0 [0; 0]	-0.40	-0.30	0.0 [-0.5; 0.4]	0.0 [-0.2; 0.2]
Costa Rica	1 [-3; 5]	0 [0; 0]	0.50	-0.10	0.0 [-0.1; 0.1]	0.0 [-0.1; 0.1]
Côte d'Ivoire	-1,310 [-2,230; -470]	-909 [-2,210; 61]	-5.80	-4.30	-5.9 [-10.1; -2.1]	-2.9 [-7.0; 0.2]
Croatia	-3 [-6; 0]	-1 [-2; 0]	-3.30	-2.80	-0.1 [-0.2; 0.0]	0.0 [-0.1; 0.0]
Cuba	2 [-7; 11]	0 [0; 0]	0.40	0.10	0.0 [-0.1; 0.1]	0.0 [-0.1; 0.1]
Cyprus	0 [0; 0]	0 [0; 0]	0.50	0.50	0.0 [-0.1; 0.1]	0.0 [-0.1; 0.1]
Czech Republic	-3 [-8; 2]	-1 [-3; 2]	-1.40	-0.90	-0.1 [-0.1; 0.0]	0.0 [-0.1; 0.0]
Denmark	-1 [-3; 1]	0 [0; 0]	-1.10	-0.80	0.0 [-0.1; 0.0]	0.0 [-0.1; 0.0]
Djibouti	-8 [-49; 27]	-4 [-44; 14]	-1.20	-1.10	-0.7 [-4.6; 2.5]	-0.4 [-4.0; 1.4]
Dominica	0 [0; 0]	0 [0; 0]	-0.20	-0.20	0.0 [-0.3; 0.2]	0.0 [-0.1; 0.1]
Dominican Republic	-35 [-144; 73]	-10 [-70; 30]	-1.20	-1.00	-0.4 [-1.5; 0.7]	-0.1 [-0.7; 0.2]
Ecuador	60 [-110; 240]	12 [-48; 71]	1.70	1.10	0.4 [-0.8; 1.7]	0.1 [-0.3; 0.5]
Egypt	3,400 [2,500; 4,300]	204 [130; 280]	8.40	3.50	4.1 [3.0; 5.3]	0.2 [-0.1; 0.3]
El Salvador	-22 [-158; 98]	-2 [-19; 12]	-1.00	-0.80	-0.3 [-2.0; 1.2]	0.0 [-0.3; 0.2]
Equatorial Guinea	3 [-50; 59]	4 [-50; 52]	0.30	0.60	0.4 [-7.0; 8.2]	0.3 [-4.3; 4.5]
Eritrea	-342 [-640; -67]	-119 [-366; 28]	-4.40	-3.80	-5.4 [-10.1; -1.1]	-1.2 [-3.6; 0.3]
Estonia	-2 [-5; 1]	0 [0; 0]	-2.20	-1.50	-0.2 [-0.4; 0.1]	0.0 [-0.1; 0.0]
Ethiopia	-2,640 [-7,600; 2,420]	-692 [-3,730; 1,510]	-1.50	-1.10	-2.7 [-7.7; 2.4]	-0.5 [-2.6; 1.1]
Federated States of Micronesia	0 [0; 0]	0 [0; 0]	0.10	-0.60	0.0 [-1.9; 1.7]	-0.1 [-3.2; 0.7]
Fiji	1 [-4; 6]	1 [-2; 4]	1.00	1.10	0.1 [-0.4; 0.6]	0.1 [-0.2; 0.4]
Finland	-2 [-4; 0]	-1 [-2; 0]	-2.70	-2.50	-0.1 [-0.1; 0.0]	0.0 [-0.1; 0.0]
France	-29 [-47; -11]	-3 [-16; 8]	-2.30	-0.60	-0.1 [-0.1; 0.0]	0.0 [0.0; 0.0]
Gabon	-8 [-61; 41]	9 [-69; 38]	-0.80	-0.90	-0.5 [-3.9; 2.6]	-0.4 [-2.9; 1.6]
The Gambia	-21 [-184; 143]	-2 [-119; 70]	-0.60	-0.10	-1.1 [-9.6; 7.4]	-0.1 [-3.6; 2.1]
Georgia	0 [0; 0]	0 [0; 0]	0.00	0.20	0.0 [-0.5; 0.5]	0.0 [-0.2; 0.3]
Germany	-10 [-30; 10]	3 [-7; 13]	-0.70	0.60	0.0 [-0.1; 0.0]	0.0 [0.0; 0.0]
Ghana	-348 [-1,120; 390]	-264 [-1,140; 416]	-1.30	-1.50	-1.4 [-4.4; 1.5]	-0.7 [-3.1; 1.1]
Greece	2 [-1; 6]	1 [-1; 4]	1.80	1.80	0.0 [0.0; 0.1]	0.0 [0.0; 0.1]
Grenada	0 [0; 0]	0 [0; 0]	0.50	0.40	0.0 [-0.4; 0.5]	0.0 [-0.2; 0.3]
Guatemala	157 [-94; 417]	42 [-100; 148]	2.30	1.70	1.0 [-6.6; 2.8]	0.2 [-0.5; 0.7]
Guinea	460 [-260; 1,210]	154 [-389; 718]	1.80	1.10	3.8 [-2.2; 10.0]	0.8 [-2.0; 3.8]
Guinea-Bissau	-146 [-324; 9]	-104 [-276; 28]	-4.10	-3.70	-7.3 [-16.1; 0.5]	-3.8 [-9.8; 1.0]
Guyana	-8 [-25; 4]	-5 [-19; 1]	-3.50	-4.00	-1.0 [-3.0; 0.4]	-0.5 [-2.1; 0.1]
Haiti	-168 [-571; 198]	-94 [-330; 104]	-1.40	-1.80	-1.4 [-4.7; 1.6]	-0.8 [-2.6; 0.8]
Honduras	-12 [-122; 92]	0 [0; 0]	-0.50	0.10	-0.1 [-1.5; 1.1]	0.0 [-0.3; 0.3]
Hungary	-2 [-7; 3]	0 [0; 0]	-0.90	0.30	0.0 [-0.1; 0.0]	0.0 [0.0; 0.1]
Iceland	0 [0; 0]	0 [0; 0]	0.20	0.20	0.0 [-0.1; 0.1]	0.0 [-0.1; 0.1]
India	163,000 [145,000; 181,000]	58,300 [49,300; 68,100]	16.30	18.50	13.6 [12.1; 15.1]	5.0 [4.3; 5.9]
Indonesia	-774 [-3,610; 2,040]	-272 [-1,330; 652]	-0.70	-1.00	-0.3 [-1.6; 0.9]	-0.1 [-0.5; 0.3]
Iran (Islamic Republic of)	2,370 [1,310; 3,490]	280 [120; 470]	9.60	8.00	2.5 [1.4; 3.7]	0.4 [0.2; 0.7]
Iraq	-71 [-448; 265]	-70 [-430; 200]	-1.00	-1.20	-0.2 [-1.5; 0.9]	-0.2 [-0.9; 0.4]
Ireland	-1 [-3; 1]	0 [0; 0]	-0.90	-0.50	0.0 [-0.1; 0.0]	0.0 [0.0; 0.0]
Israel	6 [2; 11]	3 [-1; 7]	3.40	2.10	0.1 [0.1; 0.2]	0.0 [0.0; 0.1]

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Table 9 – continued from previous page

	Excess female deaths CMR		% of deaths CMR		Excess female CMR (per 1,000)	
	1990	2012	1990	2012	1990	2012
Italy	21 [10; 32]	10 [0; 20]	3.00	2.80	0.1 [0.0; 0.1]	0.0 [0.0; 0.1]
Jamaica	-9 [-33; 6]	-3 [-12; 3]	-3.10	-2.40	-0.3 [-1.1; 0.2]	-0.1 [-0.5; 0.1]
Japan	-57 [-85; -28]	11 [-6; 29]	-2.50	1.30	-0.1 [-0.1; 0.0]	0.0 [0.0; 0.1]
Jordan	43 [4; 89]	23 [-2; 56]	5.50	4.50	0.8 [0.1; 1.6]	0.3 [0.0; 0.6]
Kazakhstan	-33 [-247; 139]	-7 [-47; 26]	-1.00	-1.10	-0.2 [-1.4; 0.8]	0.0 [-0.3; 0.2]
Kenya	-893 [-1,970; 163]	-719 [-2,940; 737]	-2.70	-2.00	-2.0 [-4.3; 0.4]	-1.0 [-4.1; 1.0]
Kiribati	0 [0; 0]	0 [0; 0]	0.10	0.00	0.0 [-3.6; 3.8]	0.0 [-2.5; 1.8]
Democratic People's Republic of Korea	12 [-292; 272]	-6 [-150; 118]	0.30	-0.30	0.1 [-1.5; 1.4]	0.0 [-0.9; 0.7]
Republic of Korea	21 [13; 29]	51 [-1; 10]	3.00	1.80	0.1 [0.0; 0.1]	0.0 [0.0; 0.0]
Kuwait	0 [0; 0]	0 [0; 0]	0.00	0.10	0.0 [-0.1; 0.1]	0.0 [-0.1; 0.1]
Kyrgyzstan	-19 [-134; 73]	-3 [-26; 16]	-1.10	-0.80	-0.3 [-2.2; 1.2]	-0.1 [-0.4; 0.3]
Lao People's Democratic Republic	19 [-505; 551]	11 [-211; 209]	0.20	0.30	0.3 [-6.6; 7.2]	0.1 [-2.4; 2.4]
Latvia	-4 [-9; 0]	-1 [-2; 0]	-2.80	-2.70	-0.2 [-0.4; 0.0]	-0.1 [-0.1; 0.0]
Lebanon	-2 [-22; 15]	0 [0; 0]	-0.60	-0.40	-0.1 [-0.7; 0.5]	0.0 [-0.2; 0.1]
Lesotho	-19 [-68; 23]	-27 [-120; 44]	-2.10	-1.90	-0.7 [-2.7; 0.9]	-1.0 [-4.5; 1.7]
Liberia	-111 [-389; 161]	-37 [-198; 70]	-1.50	-1.40	-2.7 [-9.5; 3.9]	-0.6 [-2.9; 1.0]
Libya	36 [-7; 103]	9 [-5; 32]	4.40	3.30	0.6 [-0.1; 1.7]	0.1 [-0.1; 0.5]
Lithuania	-4 [-9; 0]	-1 [-2; 0]	-2.30	-2.20	-0.2 [-0.3; 0.0]	0.0 [-0.1; 0.0]
Luxembourg	0 [0; 0]	0 [0; 0]	0.10	0.00	0.0 [-0.2; 0.2]	0.0 [0.0; 0.1]
Macedonia	7 [3; 11]	1 [0; 2]	5.60	4.70	0.4 [0.2; 0.7]	0.1 [0.0; 0.2]
Madagascar	-517 [-1,330; 282]	-150 [-1,960; 330]	-1.80	-1.20	-2.4 [-6.1; 1.3]	-0.4 [-2.7; 0.9]
Malawi	-1,050 [-2,200; 40]	-299 [-998; 234]	-2.50	-2.00	-5.5 [-11.5; 0.2]	-1.0 [-3.4; 0.8]
Malaysia	0 [0; 0]	0 [0; 0]	0.00	0.00	0.0 [-0.3; 0.3]	0.0 [-0.1; 0.1]
Maldives	1 [-12; 14]	0 [0; 0]	0.20	0.30	0.1 [-2.8; 3.3]	0.0 [-0.1; 0.2]
Mali	193 [-847; 1,240]	99 [-997; 1,360]	0.40	0.30	1.1 [-5.0; 7.4]	0.3 [-3.4; 4.6]
Malta	0 [0; 0]	0 [0; 0]	1.90	1.50	0.1 [-0.1; 0.2]	0.0 [-0.1; 0.1]
Marshall Islands	0 [0; 0]	0 [0; 0]	0.30	-0.10	0.1 [-1.5; 1.4]	0.0 [-1.1; 0.8]
Mauritania	-69 [-224; 75]	-30 [-290; 70]	-1.90	-1.30	-1.9 [-6.2; 2.1]	-0.5 [-4.9; 1.2]
Mauritius	2 [1; 4]	1 [0; 2]	3.80	3.70	0.2 [0.1; 0.4]	0.2 [0.0; 0.3]
Mexico	569 [-126; 1,230]	101 [13; 186]	2.60	1.90	0.5 [-0.1; 1.1]	0.1 [0.0; 0.2]
Republic of Moldova	0 [0; 0]	0 [0; 0]	0.00	-0.10	0.0 [-0.7; 0.6]	0.0 [-0.3; 0.3]
Monaco	0 [0; 0]	0 [0; 0]	0.00	0.00	0.0 [-0.2; 0.2]	0.0 [-0.1; 0.1]
Mongolia	-105 [-467; 47]	-11 [-56; 6]	-4.80	-3.90	-3.1 [-13.7; 1.4]	-0.4 [-1.9; 0.2]
Montenegro	0 [0; 0]	0 [0; 0]	1.50	1.20	0.1 [-0.1; 0.3]	0.0 [0.0; 0.1]
Morocco	528 [101; 959]	93 [-15; 204]	4.10	3.30	1.5 [0.3; 2.7]	0.3 [0.0; 0.7]
Mozambique	-1,160 [-2,640; 280]	-551 [-1,600; 387]	-2.60	-2.20	-4.4 [-10.1; 1.1]	-1.2 [-3.6; 0.9]
Myanmar	-149 [-2,100; 1,790]	-10 [-790; 520]	-0.40	-0.10	-0.3 [-3.8; 3.2]	0.0 [-1.8; 1.2]
Namibia	-28 [-83; 22]	-12 [-67; 15]	-2.40	-2.10	-1.2 [-3.5; 0.9]	-0.4 [-2.3; 0.5]
Nauru	0 [0; 0]	0 [0; 0]	0.30	-0.10	0.1 [-2.8; 1.7]	0.0 [-1.4; 0.8]
Nepal	2,990 [2,060; 3,990]	425 [206; 684]	10.40	8.40	9.9 [6.8; 13.3]	1.4 [0.7; 2.3]
Netherlands	-5 [-11; 0]	-2 [-5; 1]	-1.70	-1.40	-0.1 [-0.1; 0.0]	0.0 [-0.1; 0.0]
New Zealand	-2 [-4; 1]	0 [0; 0]	-1.70	-0.40	-0.1 [-0.2; 0.0]	0.0 [-0.1; 0.1]
Nicaragua	-39 [-145; 56]	-8 [-42; 14]	-1.70	-1.60	-0.6 [-2.1; 0.8]	-0.1 [-0.6; 0.2]
Niger	1,790 [60; 3,550]	562 [-744; 2,090]	2.40	1.50	9.3 [0.3; 18.4]	1.6 [-2.0; 5.7]
Nigeria	-810 [-8,760; 7,400]	2,930 [-6,290; 12,300]	-0.20	1.00	-0.4 [-4.8; 4.1]	1.0 [-2.1; 4.0]
Niue	0 [0; 0]	0 [0; 0]	0.00	-0.50	0.0 [-0.2; 0.2]	0.0 [-1.0; 0.4]
Norway	-3 [-6; -1]	-1 [-2; 0]	-3.30	-2.10	-0.1 [-0.2; 0.0]	0.0 [-0.1; 0.0]
Oman	15 [-12; 51]	2 [3; 10]	3.00	2.10	0.5 [-0.4; 1.6]	0.1 [-0.1; 0.3]
Pakistan	15,300 [11,400; 19,200]	6,980 [3,900; 10,400]	10.90	8.90	8.0 [6.0; 10.0]	3.3 [1.8; 4.8]
Palau	0 [0; 0]	0 [0; 0]	1.20	0.70	0.1 [-0.2; 0.5]	0.1 [-0.8; 0.8]
Panama	0 [0; 0]	-1 [-12; 10]	0.10	-0.30	0.0 [-0.6; 0.6]	0.0 [-0.3; 0.3]
Papua New Guinea	3 [-204; 213]	2 [-276; 187]	0.10	0.10	0.0 [-3.2; 3.4]	0.0 [-2.9; 2.0]
Paraguay	-2 [-66; 56]	0 [0; 0]	-0.10	-0.10	0.0 [-1.0; 0.9]	0.0 [-0.4; 0.3]
Peru	296 [-105; 696]	33 [-49; 118]	2.00	1.40	1.0 [-0.4; 2.3]	0.1 [-0.2; 0.4]
Philippines	-267 [-1,410; 847]	-158 [-1,300; 386]	-0.80	-1.10	-0.3 [-1.5; 0.9]	-0.1 [-1.2; 0.4]
Poland	-22 [-41; -3]	0 [0; 0]	-1.60	-0.10	-0.1 [-0.1; 0.0]	0.0 [0.0; 0.0]
Portugal	-10 [-20; 0]	-2 [-4; 0]	-2.70	-2.20	-0.2 [-0.3; -0.1]	0.0 [-0.1; 0.0]
Qatar	0 [0; 0]	0 [0; 0]	1.20	1.40	0.1 [-0.2; 0.4]	0.0 [-0.1; 0.1]
Romania	1 [-30; 33]	-1 [-8; 7]	0.00	-0.20	0.0 [-0.2; 0.2]	0.0 [-0.1; 0.1]
Russian Federation	-289 [-390; -195]	-62 [-102; -20]	-2.90	-2.50	-0.3 [-0.3; -0.2]	-0.1 [-0.1; 0.0]
Rwanda	-736 [-1,210; -279]	-106 [-1,455; 119]	-3.90	-1.60	-4.8 [-7.9; -1.8]	-0.5 [-2.3; 0.6]
Saint Kitts and Nevis	0 [0; 0]	0 [0; 0]	0.40	0.30	0.1 [-0.6; 0.8]	0.0 [-0.2; 0.3]
Saint Lucia	0 [0; 0]	0 [0; 0]	-0.10	0.00	0.0 [-0.4; 0.3]	0.0 [-0.2; 0.2]
Samoa	0 [0; 0]	0 [0; 0]	0.60	0.90	0.1 [-0.5; 0.7]	0.0 [-0.2; 0.3]
San Marino	0 [0; 0]	0 [0; 0]	0.00	0.00	0.0 [-0.1; 0.1]	0.0 [0.0; 0.0]
Sao Tome and Principe	-1 [-10; 8]	0 [0; 0]	-0.40	0.00	-0.3 [-4.7; 3.9]	0.0 [-2.9; 1.6]
Saudi Arabia	143 [-109; 391]	16 [-10; 44]	2.70	2.10	0.5 [-0.4; 1.4]	0.1 [0.0; 0.1]
Senegal	-318 [-799; 152]	25 [-510; 240]	-1.50	0.40	-2.2 [-5.4; 1.0]	0.1 [-2.2; 1.1]
Serbia	26 [15; 38]	2 [0; 5]	4.30	2.70	0.4 [-0.2; 0.5]	0.1 [0.0; 0.1]
Seychelles	0 [0; 0]	0 [0; 0]	1.20	0.90	0.1 [-0.2; 0.3]	0.0 [-0.1; 0.2]
Sierra Leone	-86 [-978; 779]	-33 [-712; 715]	-0.50	-0.20	-1.1 [-12.1; 9.6]	-0.3 [-7.0; 7.1]
Singapore	2 [0; 4]	1 [0; 2]	2.90	2.50	0.1 [0.0; 0.2]	0.0 [0.0; 0.1]
Slovakia	2 [-2; 7]	1 [-1; 3]	1.40	1.20	0.1 [0.0; 0.2]	0.0 [0.0; 0.1]
Slovenia	0 [0; 0]	0 [0; 0]	-0.30	0.10	0.0 [-0.1; 0.1]	0.0 [0.0; 0.1]
Solomon Islands	0 [0; 0]	-1 [-1; 4]	-0.30	-0.80	0.0 [-1.1; 0.9]	-0.1 [-1.4; 0.5]
Somalia	-192 [-1,280; 805]	-152 [-1,750; 1,370]	-1.00	-0.60	-1.5 [-10.2; 6.4]	-0.8 [-8.5; 6.6]
South Africa	-253 [-1,160; 494]	-189 [-1,100; 482]	-1.70	-1.40	-0.5 [-2.2; 1.0]	-0.3 [-2.0; 0.9]
South Sudan	-28 [-1,790; 1,810]	19 [-936; 995]	-0.10	0.10	-0.2 [-15.1; 15.4]	0.1 [-5.2; 5.6]
Spain	-2 [-13; 9]	6 [1; 13]	-0.30	1.60	0.0 [-0.1; 0.0]	0.0 [0.0; 0.1]
Sri Lanka	92 [77; 109]	29 [16; 42]	7.90	5.50	0.5 [0.4; 0.6]	0.2 [0.1; 0.2]
State of Palestine	-3 [-34; 25]	-6 [-26; 10]	-0.50	-1.50	-0.1 [-0.9; 0.7]	-0.1 [-0.4; 0.2]
Saint Vincent and the Grenadines	0 [0; 0]	0 [0; 0]	-0.90	-0.80	-0.1 [-0.5; 0.3]	0.0 [-0.3; 0.2]
Sudan	.99 [-1,430; 1,230]	-105 [-1,430; 1,080]	-0.30	-0.40	-0.3 [-4.0; 3.4]	-0.2 [-2.5; 1.9]
Suriname	0 [0; 0]	0 [0; 0]	-0.20	-0.30	0.0 [-1.2; 0.9]	0.0 [-0.4; 0.3]
Swaziland	4 [-28; 35]	7 [-44; 53]	0.60	0.80	0.2 [-1.7; 2.1]	0.4 [-2.6; 3.1]
Sweden	-1 [-4; 2]	0 [0; 0]	-1.10	-0.70	0.0 [-0.1; 0.0]	0.0 [0.0; 0.0]
Switzerland	-3 [-6; 0]	-1 [-2; 1]	-2.40	-1.80	-0.1 [-0.2; 0.0]	0.0 [-0.1; 0.0]
Syria	84 [-58; 244]	32 [-32; 110]	2.70	2.20	0.4 [-0.3; 1.2]	0.1 [-0.1; 0.4]
Tajikistan	-39 [-351; 227]	-12 [-425; 98]	-0.80	-0.60	-0.4 [-3.7; 2.4]	-0.1 [-3.8; 0.9]
Tanzania	-2,080 [-4,040; -190]	-785 [-2,540; 377]	-3.00	-2.70	-4.2 [-8.2; -0.4]	-0.9 [-3.0; 0.4]
Thailand	-70 [-440; 280]	-5 [-71; 57]	-0.90	-0.40	-0.1 [-0.8; 0.5]	0.0 [-0.2; 0.2]
Timor Leste	-8 [-65; 48]	-3 [-28; 13]	-0.60	-0.70	-0.6 [-5.1; 3.7]	-0.1 [-1.5; 0.7]
Togo	-185 [-470; 94]	-141 [-517; 184]	-2.20	-1.80	-2.6 [-6.5; 1.3]	-1.3 [-4.7; 1.7]
Tonga	0 [0; 0]	0 [0; 0]	0.00	0.00	0.0 [-0.4; 0.4]	0.0 [-0.2; 0.2]
Trinidad and Tobago	3 [-3; 11]	1 [-1; 5]	2.20	1.90	0.2 [-0.2; 0.8]	0.1 [-0.2; 0.5]
Tunisia	147 [21; 298]	24 [3; 51]	6.00	5.60	1.4 [0.2; 2.8]	0.3 [0.0; 0.6]
Turkey	547 [-638; 1,760]	36 [-74; 169]	2.10	1.40	0.8 [-0.9; 2.6]	0.1 [-0.1; 0.3]
Turkmenistan	-34 [-232; 97]	-14 [-166; 32]	-1.60	-1.60	-0.6 [-4.1; 1.7]	-0.3 [-3.3; 0.6]
Tuvalu	0 [0; 0]	0 [0; 0]	5.30	4.60	1.5 [-0.5; 8.1]	0.5 [-0.3; 3.0]
Uganda	-3,960 [-5,580; -2,420]	-2,340 [-4,120; -970]	-7.00	-6.90	-10.7 [-15.1; -6.6]	-3.4 [-5.9; -1.4]

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Table 9 – continued from previous page

	Excess female deaths CMR		% of deaths CMR		Excess female CMR (per 1,000)	
	1990	2012	1990	2012	1990	2012
Ukraine	-28 [-55; -3]	-10 [-20; 0]	-1.30	-1.30	-0.1 [-0.2; 0.0]	0.0 [-0.1; 0.0]
United Arab Emirates	0 [0; 0]	0 [0; 0]	0.00	0.00	0.0 [-0.3; 0.2]	0.0 [-0.1; 0.1]
United Kingdom	1 [-15; 17]	9 [-4; 22]	0.10	1.50	0.0 [0.0; 0.0]	0.0 [0.0; 0.1]
United States of America	-90 [-160; -20]	-36 [-124; 49]	-1.30	-0.80	0.0 [-0.1; 0.0]	0.0 [-0.1; 0.0]
Uruguay	4 [1; 8]	1 [-1; 3]	2.80	1.80	0.2 [0.0; 0.3]	0.0 [0.0; 0.1]
Uzbekistan	-135 [-92; 397]	-66 [-620; 97]	-1.50	-2.00	-0.4 [-2.9; 1.2]	-0.2 [-2.1; 0.3]
Vanuatu	0 [0; 0]	0 [0; 0]	-0.20	0.10	0.0 [-0.9; 0.8]	0.0 [-0.4; 0.4]
Venezuela (Bolivarian Republic of)	100 [0; 300]	42 [-23; 148]	3.70	3.30	0.4 [-0.1; 1.2]	0.1 [-0.1; 0.5]
Vietnam	-488 [-1,980; 752]	-96 [-415; 199]	-1.80	-1.40	-0.5 [-2.1; 0.8]	-0.1 [-0.6; 0.3]
Yemen	749 [86; 1,440]	277 [-238; 702]	3.60	2.80	2.9 [0.3; 5.6]	0.8 [-0.7; 2.1]
Zambia	-569 [-1,230; 88]	-539 [-1,580; 111]	-2.30	-3.10	-3.8 [-8.1; 0.6]	-2.1 [-5.9; 0.4]
Zimbabwe	-98 [-460; 239]	-123 [-840; 495]	-1.10	-0.80	-0.5 [-2.5; 1.3]	-0.6 [-4.0; 2.4]

Table 10: Estimates and 90% uncertainty intervals for excess female under-5 deaths, excess female U5MR, and the percentage of excess female deaths among all under-5 deaths in 1990 and 2012 for the world, MDG regions, and all countries.

	Excess female deaths USMR		% of deaths U5MR		Excess female U5MR (per 1,000)	
	1990	2012	1990	2012	1990	2012
World	378,000 [312,000; 447,000]	177,000 [140,000; 214,000]	3.00	2.70	6.0 [4.9; 7.0]	2.8 [2.2; 3.3]
Developed regions	-3,360 [-4,260; -2,480]	-286 [-878; 314]	-1.50	-0.30	-0.5 [-0.6; -0.3]	0.0 [-0.1; 0.0]
Northern Africa	10,900 [8,400; 13,500]	2,350 [1,450; 3,240]	4.10	2.70	6.4 [4.9; 7.9]	1.2 [0.8; 1.7]
Sub-Saharan Africa	-23,100 [-44,000; -2,200]	-13,800 [-38,100; 10,700]	-0.60	-0.40	-2.6 [-4.8; -0.3]	-0.9 [-2.5; 0.7]
Eastern Asia	66,600 [22,400; 114,000]	8,560 [2,200; 16,000]	4.00	3.10	4.6 [1.6; 7.8]	1.0 [0.2; 1.8]
Southern Asia	344,000 [305,000; 384,000]	185,000 [161,000; 211,000]	7.20	8.80	20.3 [18.1; 22.5]	11.0 [9.5; 12.5]
South-eastern Asia	-13,500 [-22,100; -5,300]	-4,540 [-9,690; 200]	-1.60	-1.30	-2.4 [-4.0; -1.0]	-0.8 [-1.8; 0.0]
Western Asia	3,760 [840; 6,760]	1,140 [-640; 2,760]	1.40	0.90	2.0 [0.4; 3.5]	0.5 [-0.3; 1.2]
Caucasus and Central Asia	-4,450 [-6,760; -2,370]	-1,720 [-4,050; -440]	-3.00	-2.60	-4.8 [-7.3; -2.6]	-2.1 [-4.9; -0.5]
Latin America and the Caribbean	-2,150 [-9,100; 4,660]	-358 [-2,160; 1,420]	-0.30	-0.20	-0.4 [-1.7; 0.9]	-0.1 [-0.4; 0.3]
Oceania	8 [-461; 473]	-2 [-650; 492]	0.10	0.00	0.1 [-5.3; 5.4]	0.0 [-5.3; 4.0]
Afghanistan	2,480 [400; 4,720]	2,810 [330; 5,390]	2.60	2.70	8.5 [1.4; 16.0]	5.2 [0.6; 9.9]
Albania	461 [-81; 181]	10 [-10; 40]	1.20	1.30	1.0 [-1.8; 4.0]	0.5 [-0.6; 1.9]
Algeria	78 [-466; 606]	-11 [-465; 455]	0.20	-0.10	0.2 [-1.1; 1.5]	0.0 [-0.9; 0.9]
Andorra	0 [0; 0]	0 [0; 0]	-0.10	0.00	0.0 [-0.6; 0.6]	0.0 [-0.2; 0.2]
Angola	-517 [-2,750; 1,690]	-415 [-4,840; 3,650]	-0.50	-0.30	-1.8 [-9.6; 5.9]	-0.9 [-9.8; 7.1]
Antigua and Barbuda	0 [0; 0]	0 [0; 0]	-0.20	0.00	-0.1 [-1.8; 1.6]	0.0 [-0.7; 0.8]
Argentina	10 [-140; 160]	54 [-85; 189]	0.00	0.50	0.0 [-0.4; 0.4]	0.2 [-0.2; 0.5]
Armenia	-18 [-143; 103]	0 [0; 0]	-0.50	0.00	-0.5 [-3.5; 2.5]	0.0 [-1.1; 1.1]
Australia	-40 [-60; -20]	-43 [-69; -18]	-1.80	-2.80	-0.3 [-0.5; -0.1]	-0.3 [-0.4; -0.1]
Austria	-9 [-19; 1]	-5 [-12; 1]	-1.20	-1.60	-0.2 [-0.5; 0.0]	-0.1 [-0.3; 0.0]
Azerbaijan	-293 [-770; 158]	116 [-59; 280]	-1.50	1.90	-3.0 [-7.5; 1.3]	1.4 [-0.8; 3.4]
Bahamas	4 [1; 7]	3 [0; 6]	3.20	2.80	1.5 [0.4; 2.6]	0.9 [0.0; 2.1]
Bahrain	24 [16; 31]	11 [6; 18]	7.10	5.90	3.2 [2.3; 4.2]	1.1 [0.6; 1.8]
Bangladesh	16,800 [9,800; 23,700]	3,330 [790; 5,880]	3.20	2.60	8.8 [5.3; 12.3]	2.1 [0.5; 3.8]
Barbados	1 [-1; 3]	1 [0; 4]	1.40	2.10	0.5 [-0.3; 1.3]	0.8 [-0.3; 2.0]
Belarus	-88 [-115; -61]	-18 [-28; -8]	-3.40	-3.20	-1.2 [-1.5; -0.8]	-0.3 [-0.5; -0.2]
Belgium	-32 [-45; -18]	-12 [-22; -1]	-2.70	-2.20	-0.6 [-0.8; -0.3]	-0.2 [-0.3; 0.0]
Belize	1 [-8; 9]	1 [-3; 5]	0.30	0.40	0.2 [-2.4; 2.8]	0.2 [-0.9; 1.2]
Benin	211 [-438; 858]	314 [-521; 1,040]	0.50	1.00	1.6 [-3.7; 7.0]	1.7 [-3.0; 5.6]
Bhutan	18 [-52; 86]	2 [22; 21]	0.70	0.30	1.6 [-4.8; 7.8]	0.2 [-2.9; 2.8]
Bolivia (Plurinational State of)	37 [-424; 507]	31 [-280; 297]	0.10	0.30	0.4 [-3.3; 4.1]	0.2 [-2.2; 2.3]
Bosnia and Herzegovina	-2 [-22; 18]	-2 [-7; 2]	-0.10	-1.10	0.0 [-0.6; 0.5]	-0.2 [-0.4; 0.1]
Botswana	4 [-62; 65]	8 [-128; 80]	0.20	0.30	0.2 [-2.6; 2.7]	0.4 [-5.4; 3.3]
Brazil	-2,850 [-8,980; 3,060]	-449 [-1,830; 886]	-1.30	-1.10	-1.6 [-5.0; 1.7]	-0.3 [-1.3; 0.6]
Brunei	0 [0; 0]	0 [0; 0]	0.60	0.50	0.1 [-0.5; 0.8]	0.1 [-0.4; 0.6]
Bulgaria	-17 [-44; 11]	3 [-12; 17]	-0.70	0.40	-0.3 [-0.8; 0.2]	0.1 [-0.3; 0.5]
Burkina Faso	22 [-1,250; 1,280]	237 [-1,220; 1,680]	0.00	0.40	0.1 [-5.8; 6.0]	0.8 [-3.8; 5.0]
Burundi	-638 [-1,530; 207]	-437 [-1,830; 661]	-1.50	-1.00	-4.1 [-10.2; 1.7]	-1.8 [-8.3; 3.2]
Cambodia	-374 [-1,130; 356]	-181 [-1,020; 173]	-0.90	-1.30	-2.2 [-6.3; 1.8]	-1.0 [-5.8; 1.0]
Cameroun	-761 [-2,020; 440]	-653 [-3,180; 1,140]	-1.10	-0.90	-2.7 [-7.3; 1.7]	-1.6 [-8.0; 2.8]
Canada	-29 [-60; 4]	18 [-19; 56]	-0.90	0.80	-0.2 [-0.3; 0.0]	0.1 [-0.1; 0.3]
Cape Verde	1 [-30; 33]	0 [0; 0]	0.10	0.10	0.2 [-4.2; 4.7]	0.0 [-1.6; 1.6]
Central African Republic	118 [-244; 477]	88 [-438; 608]	0.60	0.50	1.9 [-3.8; 7.5]	1.1 [-5.7; 7.3]
Chad	-255 [-1,320; 783]	-282 [-2,400; 1,780]	-0.40	-0.30	-1.9 [-8.6; 4.8]	-0.9 [-8.3; 5.8]
Chile	54 [4; 106]	9 [-29; 51]	1.00	0.40	0.4 [0.0; 0.7]	0.1 [-0.2; 0.4]
China	67,000 [23,000; 114,000]	8,690 [2,330; 16,100]	4.10	3.30	4.5 [1.5; 7.6]	1.0 [0.3; 1.9]
Colombia	-289 [-970; 370]	-108 [-550; 331]	-0.90	-0.70	-0.6 [-2.2; 0.8]	-0.2 [-1.2; 0.7]
Comoros	-8 [-66; 47]	-4 [-108; 58]	-0.40	-0.20	-1.0 [-8.5; 6.1]	-0.3 [-8.6; 4.5]
Congo	-18 [-260; 220]	-8 [-553; 432]	-0.20	-0.10	-0.4 [-5.8; 4.8]	-0.1 [-6.7; 5.1]
Democratic Republic of the Congo	-75 [-5,170; 4,900]	-3,180 [-14,100; 6,570]	0.00	-0.80	-0.5 [-6.5; 5.2]	-2.3 [-10.0; 4.4]
Cook Islands	0 [0; 0]	0 [0; 0]	-0.20	-0.10	-0.1 [-1.7; 1.5]	0.0 [-0.7; 0.7]
Costa Rica	-4 [-21; 13]	2 [-11; 16]	-0.30	0.30	-0.1 [-0.5; 0.3]	0.1 [-0.3; 0.4]
Cote d'Ivoire	-2,040 [-3,690; -500]	-1,440 [-3,980; 700]	-2.80	-1.90	-8.1 [-14.4; -2.2]	-4.1 [-11.0; 1.6]
Croatia	-12 [-23; 2]	1 [-4; 5]	-1.60	0.30	-0.4 [-0.8; -0.1]	0.0 [-0.2; 0.2]
Cuba	-54 [-79; -28]	-7 [-17; 3]	-2.20	-1.20	-0.6 [-0.9; -0.3]	-0.1 [-0.3; 0.1]
Cyprus	1 [-3; 4]	0 [0; 0]	0.40	0.40	0.1 [-0.4; 0.6]	0.0 [-0.2; 0.2]
Czech Republic	-51 [-77; -25]	-10 [-20; 0]	-2.40	-2.20	-0.7 [-1.0; -0.3]	-0.2 [-0.3; 0.0]
Denmark	-12 [-20; -4]	-2 [-7; 4]	-2.10	-0.60	-0.4 [-0.6; -0.1]	0.0 [-0.2; 0.1]
Djibouti	12 [-97; 124]	11 [-75; 76]	0.40	0.60	0.7 [-7.0; 8.4]	0.9 [-6.3; 6.2]
Dominica	0 [0; 0]	0 [0; 0]	2.00	2.10	0.8 [-0.2; 1.9]	0.5 [-0.3; 1.5]
Dominican Republic	60 [-200; 320]	37 [-142; 201]	0.50	0.60	0.5 [-1.9; 3.0]	0.3 [-1.3; 1.9]
Ecuador	-184 [-710; 285]	-88 [-377; 152]	-1.10	-1.20	-1.1 [-4.5; 1.9]	-0.5 [-2.4; 0.9]
Egypt	9,860 [7,760; 12,100]	2,250 [1,860; 2,660]	6.40	5.60	10.6 [8.4; 13.0]	2.4 [1.9; 2.8]
El Salvador	-59 [-379; 256]	-9 [-81; 66]	-0.60	-0.40	-0.7 [-4.4; 3.0]	-0.1 [-1.2; 1.0]
Equatorial Guinea	11 [-75; 97]	6 [-103; 88]	0.40	0.20	1.3 [-8.0; 10.3]	0.5 [-7.9; 6.5]
Eritrea	-575 [-1,100; -97]	-228 [-699; 112]	-2.80	-2.00	-8.0 [-15.0; -1.5]	-2.1 [-6.5; 1.0]
Estonia	-9 [-17; -1]	-1 [-2; 0]	-1.90	-1.50	-0.8 [-1.5; -0.1]	-0.1 [-0.3; 0.1]
Ethiopia	-11,200 [-19,300; -3,200]	-4,380 [-10,700; 710]	-2.50	-2.10	-9.0 [-15.6; -2.4]	-2.8 [-7.0; 0.6]
Federated States of Micronesia	0 [0; 0]	0 [0; 0]	0.00	-0.40	0.0 [-4.6; 4.2]	-0.3 [-6.5; 2.5]
Fiji	1 [-17; 18]	0 [0; 0]	0.20	-0.10	0.1 [-1.7; 1.8]	-0.1 [-1.3; 1.2]
Finland	-5 [-11; 1]	-2 [-6; 2]	-1.20	-1.30	-0.2 [-0.4; 0.0]	-0.1 [-0.2; 0.1]
France	-219 [-272; -168]	-53 [-99; -8]	-3.50	-1.70	-0.6 [-0.8; -0.5]	-0.1 [-0.3; 0.0]
Gabon	-52 [-150; 38]	-44 [-164; 50]	-1.70	-1.40	-2.9 [-8.5; 2.2]	-1.7 [-6.3; 1.9]
The Gambia	-31 [-194; 123]	-22 [-194; 128]	-0.40	-0.40	-1.5 [-9.1; 5.8]	-0.5 [-5.6; 3.6]
Georgia	-56 [-176; 46]	-16 [-63; 23]	-1.70	-1.30	-1.2 [-3.8; 1.0]	-0.6 [-2.1; 0.8]
Germany	-183 [-246; -122]	-26 [-68; 16]	-2.50	-0.90	-0.4 [-0.6; -0.3]	-0.1 [-0.2; 0.0]
Ghana	-590 [-1,870; 700]	-537 [-2,210; 819]	-0.80	-1.00	-2.1 [-6.5; 2.4]	-1.4 [-5.6; 2.1]
Greece	29 [13; 46]	10 [0; 20]	2.20	1.90	0.6 [0.3; 0.9]	0.2 [0.0; 0.4]
Grenada	2 [-1; 4]	1 [0; 2]	2.40	2.20	1.1 [-0.3; 2.9]	0.6 [-0.3; 1.8]
Guatemala	136 [-449; 714]	33 [-448; 459]	0.50	0.20	0.9 [-2.5; 4.2]	0.2 [-1.9; 2.0]
Guinea	764 [-382; 1,900]	208 [-857; 1,240]	1.20	0.50	5.2 [-2.4; 12.6]	1.0 [-3.9; 5.8]
Guinea-Bissau	-262 [-443; -91]	-203 [-450; -10]	-3.10	-2.60	-11.3 [-19.0; -3.9]	-6.5 [-14.2; -0.4]
Guyana	43 [-78; -11]	-16 [-46; 2]	-3.70	-2.70	-4.2 [-7.7; -1.1]	-1.9 [-5.4; 0.3]
Haiti	-346 [-1,080; 376]	-214 [-755; 313]	-0.90	-1.10	-2.6 [-8.0; 2.8]	-1.6 [-5.6; 2.3]
Honduras	-78 [-362; 188]	-27 [-163; 111]	-0.70	-0.60	-0.8 [-3.9; 2.0]	-0.3 [-1.6; 1.1]
Hungary	7 [-24; 37]	7 [-4; 19]	0.20	1.20	0.1 [-0.3; 0.5]	0.2 [-0.1; 0.4]
Iceland	0 [0; 0]	0 [0; 0]	-0.10	-0.20	0.0 [-0.4; 0.4]	0.0 [-0.2; 0.1]
India	289,000 [232,000; 326,000]	166,000 [144,000; 190,000]	8.70	11.70	21.5 [18.9; 24.1]	13.5 [11.9; 15.4]
Indonesia	-5,360 [-11,400; 740]	-1,650 [-5,580; 1950]	-1.40	-1.10	-2.3 [-4.8; 0.3]	-0.7 [-2.3; 0.8]
Iran (Islamic Republic of)	7,140 [4,800; 9,480]	1,340 [590; 2,190]	6.70	5.20	7.5 [5.0; 9.9]	1.8 [0.8; 3.0]
Iraq	260 [-570; 1,060]	229 [-720; 1,130]	0.70	0.70	0.8 [-1.8; 3.2]	0.5 [-1.5; 2.3]
Ireland	-3 [-10; 4]	-1 [-7; 5]	-0.50	-0.40	-0.1 [-0.4; 0.2]	0.0 [-0.2; 0.1]
Israel	40 [30; 60]	13 [1; 25]	3.40	1.90	0.8 [0.5; 1.1]	0.2 [0.0; 0.3]

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Table 10 – continued from previous page

	Excess female deaths U5MR		% of deaths U5MR		Excess female U5MR (per 1,000)	
	1990	2012	1990	2012	1990	2012
Italy	27 [-21; 77]	21 [-15; 55]	0.50	1.00	0.1 [-0.1; 0.3]	0.1 [-0.1; 0.2]
Jamaica	-29 [-89; 27]	-13 [-46; 17]	-1.70	-1.40	-1.0 [-3.0; 0.9]	-0.5 [-1.7; 0.6]
Japan	-4 [-70; 59]	75 [32; 118]	-0.10	2.30	0.0 [-0.1; 0.1]	0.1 [0.1; 0.2]
Jordan	238 [140; 338]	188 [63; 333]	5.80	5.00	4.3 [2.5; 6.1]	1.9 [0.7; 3.4]
Kazakhstan	-725 [-1,420; -116]	-217 [-442; -22]	-3.40	-3.40	-3.6 [-7.1; -0.6]	-1.3 [-2.6; -0.1]
Kenya	-10 [-1,600; 1,630]	-206 [-3,850; 2,470]	0.00	-0.20	-0.2 [-3.3; 3.1]	-0.3 [-5.2; 3.3]
Kiribati	0 [0; 0]	0 [0; 0]	0.10	0.00	0.1 [-7.4; 7.0]	0.0 [-5.5; 4.4]
Democratic People's Republic of Korea	9 [-670; 591]	-9 [-412; 356]	0.10	-0.10	0.0 [-3.7; 3.3]	-0.1 [-2.4; 2.1]
Republic of Korea	230 [190; 270]	26 [5; 57]	5.60	1.30	0.9 [0.7; 1.0]	0.1 [0.0; 0.2]
Kuwait	15 [6; 25]	16 [2; 31]	2.30	2.10	0.8 [0.3; 1.2]	0.5 [0.1; 0.9]
Kyrgyzstan	-95 [-438; 218]	-33 [-171; 101]	-1.00	-0.80	-1.3 [-6.2; 3.1]	-0.4 [-2.3; 1.3]
Lao People's Democratic Republic	22 [-990; 1,070]	15 [-513; 509]	0.10	0.10	0.2 [-10.4; 11.3]	0.2 [-5.3; 5.2]
Latvia	-11 [-23; 2]	2 [-2; 6]	-1.20	1.10	-0.5 [-1.1; 0.1]	0.2 [-0.2; 0.6]
Lebanon	107 [44; 183]	25 [4; 62]	5.20	4.50	3.4 [1.4; 5.7]	0.8 [0.1; 2.1]
Lesotho	-29 [-137; 77]	-54 [-249; 105]	-0.60	-1.00	-1.1 [-4.9; 2.7]	-1.9 [-8.4; 3.5]
Liberia	-116 [-575; 371]	-26 [-379; 249]	-0.50	-0.20	-2.4 [-11.1; 6.9]	-0.4 [-5.2; 3.3]
Libya	57 [100; 212]	8 [53; 72]	1.10	0.40	0.9 [-1.7; 3.6]	0.1 [-0.8; 1.1]
Lithuania	-6 [-18; 6]	0 [0; 0]	-0.60	-0.10	-0.2 [-0.6; 0.2]	0.0 [-0.2; 0.2]
Luxembourg	0 [0; 0]	0 [0; 0]	0.00	0.00	0.0 [-0.5; 0.5]	0.0 [-0.1; 0.1]
Macedonia	65 [47; 82]	5 [1; 9]	5.10	3.00	3.7 [2.7; 4.7]	0.4 [0.1; 0.8]
Madagascar	116 [-1,220; 1,460]	141 [-1,290; 1,230]	0.10	0.30	-0.1 [-4.9; 4.7]	0.3 [-3.5; 3.1]
Malawi	127 [-1,470; 1,750]	-100 [-1,200; 900]	0.10	-0.20	-0.3 [-7.0; 6.5]	-0.4 [-4.1; 2.7]
Malaysia	3 [-302; 320]	4 [-156; 167]	0.00	0.10	0.0 [-1.2; 1.3]	0.0 [-0.6; 0.7]
Maldives	1 [1; 23; 26]	0 [0; 0]	0.20	0.10	0.3 [-5.1; 5.6]	0.0 [-0.6; 0.6]
Mali	45 [-1,280; 1,380]	288 [-1,780; 2,240]	0.00	0.30	0.3 [-6.2; 7.0]	0.9 [-5.4; 6.3]
Malta	1 [-1; 2]	0 [0; 0]	0.80	0.80	0.2 [-0.4; 0.8]	0.1 [-0.3; 0.5]
Marshall Islands	-1 [-6; 2]	-1 [-4; 1]	-1.10	-1.60	-1.1 [-5.6; 2.5]	-1.2 [-4.9; 1.4]
Mauritania	-263 [-488; -33]	-288 [-698; 20]	-2.60	-2.70	-6.3 [-11.7; -0.7]	-4.4 [-11.7; 0.6]
Mauritius	-6 [-13; 1]	0 [0; 0]	-1.30	-0.10	-0.6 [-1.3; 0.1]	-0.1 [-0.7; 0.6]
Mexico	1,240 [-1,300; 3,630]	419 [0; 831]	1.10	1.10	1.0 [-1.0; 3.0]	0.4 [0.0; 0.7]
Republic of Moldova	-14 [-114; 76]	-31 [-31; 25]	-0.50	-0.40	-0.3 [-2.7; 1.8]	-0.1 [-1.4; 1.1]
Monaco	0 [0; 0]	0 [0; 0]	0.10	0.00	0.0 [-0.6; 0.6]	0.0 [-0.3; 0.3]
Mongolia	-701 [-932; -485]	-137 [-248; -61]	-9.00	-7.60	-17.9 [-23.8; -12.5]	-4.1 [-7.4; -1.9]
Montenegro	7 [3; 12]	1 [0; 3]	3.90	2.60	1.4 [0.5; 2.2]	0.3 [0.0; 0.7]
Morocco	618 [-466; 1,670]	31 [-613; 664]	1.10	0.10	1.7 [-1.4; 4.6]	0.1 [-1.6; 1.8]
Mozambique	935 [-1,470; 3,410]	668 [-1,300; 2,540]	0.70	0.80	2.3 [-4.9; 9.9]	1.3 [-2.8; 5.1]
Myanmar	-1,610 [-5,340; 1,960]	-532 [-2,620; 1,050]	-1.40	-1.10	-2.8 [-9.3; 3.3]	-1.1 [-5.6; 2.2]
Namibia	-23 [-122; 75]	-18 [-111; 46]	-0.60	-0.80	-1.0 [-4.7; 2.7]	-0.6 [-3.8; 1.5]
Nauru	0 [0; 0]	0 [0; 0]	0.10	-0.10	0.0 [-6.2; 4.4]	-0.1 [-3.7; 2.7]
Nepal	4,420 [2,680; 6,140]	852 [227; 1,520]	4.60	3.50	12.9 [8.1; 17.7]	2.9 [0.7; 5.2]
Netherlands	-41 [-60; -23]	-8 [-20; 5]	-2.70	-1.10	-0.4 [-0.6; -0.3]	-0.1 [-0.2; 0.1]
New Zealand	-9 [-18; 11]	-4 [-12; 3]	-1.30	-1.20	-0.3 [-0.6; 0.0]	-0.1 [-0.4; 0.1]
Nicaragua	-60 [-260; 130]	-13 [-124; 82]	-0.60	-0.40	-0.8 [-3.6; 1.8]	-0.2 [-1.8; 1.2]
Niger	2,560 [580; 4,640]	1,310 [-720; 3,450]	2.00	1.40	11.0 [2.4; 19.9]	3.2 [-1.9; 8.1]
Nigeria	-3,470 [-16,700; 9,410]	2,360 [-15,500; 19,200]	-0.40	0.30	-1.5 [-7.5; 4.3]	0.8 [-4.3; 5.5]
Niue	0 [0; 0]	0 [0; 0]	0.00	-0.30	0.0 [-1.1; 1.2]	-0.1 [-2.9; 1.8]
Norway	-11 [-19; -3]	-4 [-8; 0]	-2.20	-2.20	-0.4 [-0.6; -0.1]	-0.1 [-0.3; 0.0]
Orman	25 [-65; 112]	4 [-25; 34]	0.90	0.50	0.7 [-1.9; 3.3]	0.1 [-0.7; 0.9]
Pakistan	24,400 [14,300; 34,300]	11,100 [1,000; 21,400]	3.90	2.70	10.9 [6.7; 15.1]	4.7 [0.5; 8.9]
Palau	0 [0; 0]	0 [0; 0]	0.00	0.10	0.0 [-2.8; 2.7]	0.0 [-1.6; 1.6]
Panama	2 [-72; 73]	-1 [-52; 52]	0.10	-0.10	0.1 [-2.2; 2.2]	0.0 [-1.4; 1.4]
Papua New Guinea	6 [-464; 472]	0 [0; 0]	0.10	0.00	0.1 [-6.7; 6.8]	0.0 [-6.4; 4.7]
Paraguay	47 [-139; 237]	19 [-93; 143]	0.80	0.60	0.7 [-2.0; 3.4]	0.2 [-1.2; 1.8]
Peru	414 [-413; 1,240]	77 [-174; 351]	0.80	0.70	1.3 [-1.2; 3.7]	0.3 [-0.6; 1.2]
Philippines	-2,550 [-4,910; -230]	-1,050 [-3,640; 690]	-2.10	-1.50	-2.4 [-4.8; -0.2]	-0.9 [-3.2; 0.6]
Poland	-83 [-154; -11]	4 [-28; 35]	-0.90	0.20	-0.3 [-0.6; 0.0]	0.0 [-0.1; 0.2]
Portugal	-10 [-30; 10]	0 [0; 0]	-0.60	-0.10	-0.2 [-0.5; 0.1]	0.0 [-0.1; 0.1]
Qatar	5 [-1; 10]	4 [-0; 8]	2.30	2.40	1.0 [-0.1; 2.1]	0.4 [0.0; 0.8]
Romania	-57 [-186; 75]	-7 [-48; 35]	-0.30	-0.30	-0.2 [-0.8; 0.3]	-0.1 [-0.4; 0.3]
Russian Federation	-1,970 [2,230; -1,600]	-175 [-384; 32]	-3.30	-1.00	-1.7 [-2.1; -1.4]	-0.2 [-0.5; 0.0]
Rwanda	-305 [-1,090; 434]	93 [-565; 624]	-0.60	0.40	-2.1 [-6.4; 2.0]	0.3 [-2.8; 2.8]
Saint Kitts and Nevis	0 [0; 0]	0 [0; 0]	0.60	0.50	0.3 [-1.4; 2.1]	0.1 [-0.5; 0.8]
Saint Lucia	0 [0; 0]	0 [0; 0]	-0.30	0.10	-0.1 [-1.2; 1.0]	0.0 [-1.0; 1.1]
Samoa	2 [-3; 8]	1 [-2; 5]	1.50	1.30	0.9 [-1.1; 3.2]	0.5 [-0.6; 1.9]
San Marino	0 [0; 0]	0 [0; 0]	0.00	0.10	0.0 [-0.8; 0.9]	0.0 [-0.3; 0.3]
Sao Tome and Principe	-2 [-16; 10]	-1 [-17; 9]	-0.50	-0.30	-1.0 [-7.2; 4.8]	-0.3 [-5.4; 2.9]
Saudi Arabia	504 [-198; 1,200]	83 [-10; 180]	2.00	1.70	1.7 [-0.7; 4.1]	0.3 [0.0; 0.6]
Senegal	-233 [-875; 401]	-156 [-1,080; 587]	-0.50	-0.50	-1.5 [-5.4; 2.3]	-0.6 [-4.7; 2.4]
Serbia	177 [-135; 217]	-4 [-16; 8]	4.10	-0.70	2.4 [-1.8; 2.9]	-0.1 [-0.4; 0.2]
Seychelles	1 [0; 1]	0 [0; 0]	2.30	2.10	0.8 [-0.2; 2.0]	0.6 [-0.3; 1.6]
Sierra Leone	-192 [-1,020; 594]	-66 [-1,020; 846]	-0.40	-0.20	-1.9 [-10.1; 5.9]	-0.5 [-8.6; 6.8]
Singapore	3 [-3; 9]	0 [0; 0]	0.90	0.20	0.1 [-0.1; 0.4]	0.0 [-0.1; 0.2]
Slovakia	-16 [-34; 2]	-2 [-10; 7]	-1.10	-0.30	-0.4 [-0.8; 0.1]	-0.1 [-0.3; 0.2]
Slovenia	-2 [-7; 3]	0 [0; 0]	-0.60	0.00	-0.1 [-0.6; 0.3]	0.0 [-0.2; 0.2]
Solomon Islands	0 [0; 0]	-1 [-28; 19]	-0.10	-0.20	-0.1 [-3.1; 2.8]	-0.1 [-3.3; 2.2]
Somalia	41 [-1,620; 1,670]	157 [-2,340; 2,380]	0.10	0.20	0.0 [-10.8; 10.5]	0.5 [-10.2; 9.4]
South Africa	-1,000 [-3,000; 1,000]	-603 [-2,490; 1,000]	-1.50	-1.20	-1.8 [-5.6; 1.6]	-1.1 [-4.4; 1.8]
South Sudan	-5 [-2,670; 2,780]	53 [-1,640; 1,620]	0.00	0.10	-0.1 [-17.9; 18.2]	0.3 [-8.3; 8.0]
Spain	9 [-33; 51]	29 [-6; 62]	0.20	1.30	0.0 [-0.2; 0.3]	0.1 [0.0; 0.3]
Sri Lanka	184 [118; 251]	64 [0; 131]	2.50	1.70	1.1 [0.7; 1.5]	0.3 [0.0; 0.7]
State of Palestine	126 [28; 222]	72 [-11; 167]	3.40	2.50	2.9 [0.6; 5.3]	1.1 [-0.2; 2.6]
Saint Vincent and the Grenadines	1 [0; 3]	1 [-1; 2]	2.00	1.80	1.0 [-0.3; 3.3]	0.9 [-0.6; 2.4]
Sudan	-1,350 [-3,580; 810]	-1,150 [-3,780; 1,140]	-1.30	-1.30	-3.1 [-8.5; 2.0]	-1.8 [-6.1; 1.9]
Suriname	-4 [-20; 10]	-2 [-11; 5]	-0.90	-0.90	-1.0 [-4.7; 2.2]	-0.4 [-2.3; 1.0]
Swaziland	-3 [-76; 65]	6 [-91; 86]	-0.10	0.20	-0.1 [-4.1; 3.5]	0.3 [-4.9; 4.6]
Sweden	-10 [-20; 0]	0 [0; 0]	-1.20	-0.10	-0.2 [-0.4; 0.0]	0.0 [-0.1; 0.1]
Switzerland	-11 [-20; -2]	0 [0; 0]	-1.70	-0.10	-0.3 [-0.5; -0.1]	0.0 [-0.2; 0.2]
Syria	251 [-126; 643]	64 [-144; 292]	1.50	0.80	1.1 [-0.6; 2.9]	0.2 [-0.5; 1.1]
Tajikistan	-396 [-1,020; 160]	-215 [-1,310; 240]	-1.70	-1.40	-3.4 [-8.9; 1.4]	-1.6 [-9.9; 1.8]
Tanzania	914 [-2,150; 3,940]	884 [-2,070; 3,280]	0.50	0.90	1.0 [-4.3; 6.1]	0.9 [-2.4; 3.5]
Thailand	-1,260 [-2,370; -220]	-203 [-515; 66]	-3.00	-2.20	-2.3 [-4.3; -0.4]	-0.6 [-1.5; 0.2]
Timor Leste	7 [-127; 143]	2 [-85; 72]	0.10	0.10	0.4 [-8.4; 9.4]	0.1 [-4.1; 3.4]
Togo	-332 [-781; 110]	-344 [-1,000; 232]	-1.50	-1.50	-4.0 [-9.3; 1.2]	-2.8 [-8.1; 1.8]
Tonga	0 [0; 0]	0 [0; 0]	0.00	-0.10	0.0 [-1.8; 1.8]	0.0 [-1.0; 1.2]
Trinidad and Tobago	9 [-16; 33]	2 [-13; 18]	1.10	0.60	0.7 [-1.4; 2.8]	0.2 [-1.3; 1.8]
Tunisia	290 [0; 590]	64 [-23; 158]	2.60	2.10	2.6 [0.0; 5.3]	0.7 [-0.2; 1.7]
Turkey	1,520 [-850; 3,980]	158 [-353; 782]	1.50	0.90	2.1 [-1.2; 5.6]	0.2 [-0.6; 1.2]
Turkmenistan	-594 [-1,560; -61]	-257 [-1,946; 16]	-5.00	-4.60	-8.5 [-22.1; -0.9]	-4.8 [-17.4; 0.3]
Tuvalu	0 [0; 0]	0 [0; 0]	1.40	0.80	1.7 [-3.0; 8.1]	0.5 [-2.1; 3.3]
Uganda	-3,670 [-6,180; -1,190]	-2,820 [-5,880; -290]	-2.50	-2.70	-9.1 [-14.7; -3.6]	-3.8 [-7.8; -0.5]

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Table 10 – continued from previous page

	Excess female deaths U5MR		% of deaths U5MR		Excess female U5MR (per 1,000)	
	1990	2012	1990	2012	1990	2012
Ukraine	-378 [-502; -262]	-76 [-149; -4]	-2.70	-1.30	-1.1 [-1.4; -0.7]	-0.3 [-0.6; 0.0]
United Arab Emirates	-6 [-30; 17]	-7 [-47; 33]	-0.80	-0.60	-0.3 [-1.3; 0.7]	-0.1 [-0.7; 0.5]
United Kingdom	-153 [-216; -90]	-38 [-92; 15]	-2.10	-1.00	-0.4 [-0.6; -0.2]	-0.1 [-0.2; 0.0]
United States of America	-285 [-552; -11]	7 [-419; 461]	-0.70	0.00	-0.1 [-0.3; 0.0]	0.0 [-0.2; 0.2]
Uruguay	1 [-16; 18]	1 [-6; 10]	0.10	0.30	0.0 [-0.5; 0.6]	0.0 [-0.2; 0.4]
Uzbekistan	-2,120 [-4,040; -540]	-872 [-2,850; -11]	-3.90	-3.50	-5.6 [-10.6; -1.4]	-2.7 [-8.8; 0.0]
Vanuatu	1 [-6; 8]	0 [0; 0]	0.60	0.40	0.4 [-2.3; 3.2]	0.1 [-1.3; 1.8]
Venezuela (Bolivarian Republic of)	-135 [-798; 447]	-59 [-425; 260]	-0.80	-0.60	-0.4 [-2.7; 1.6]	-0.2 [-1.4; 0.9]
Vietnam	-2,390 [-4,890; -90]	-592 [-1,510; 304]	-2.40	-1.80	-2.4 [-4.9; -0.1]	-0.9 [-2.2; 0.4]
Yemen	695 [-558; 1,950]	297 [-1,090; 1,420]	1.00	0.70	2.5 [-1.7; 6.7]	0.8 [-3.1; 3.9]
Zambia	-244 [-1,350; 810]	-353 [-2,080; 851]	-0.40	-0.70	-1.7 [-7.7; 4.0]	-1.4 [-7.3; 2.8]
Zimbabwe	-603 [-1,240; 15]	-726 [-1,990; 285]	-2.20	-1.90	-3.1 [-6.4; 0.1]	-3.2 [-8.8; 1.3]

Country	IMR	CMR	U5MR
Azerbaijan		★	
Belarus			★
Cote d'Ivoire		★	★
Eritrea		★	★
Ethiopia	★		★
Guinea-Bissau			★†
Guyana	★		★
Kazakhstan	★†		★†
Mauritania	★		★
Mongolia	★†		★†
Philippines	★		★
Russian Federation	★		★
Rwanda		★	
Tanzania		★	
Thailand	★		★
Turkmenistan	★		★
Uganda		★†	★†
Ukraine	★		★
Uzbekistan	★		★†
Vietnam			★

Table 11: **Overview of countries with lower-than-expected female IMR and/or female CMR and/or female U5MR in 1990 and/or 2012.** ★ : Sex ratio is outlying in 1990. †: Sex ratio is outlying in 2012. Countries are ordered alphabetically.

Table 12: **Overview of data sources used by country.** For each country, the total number of observations and the most recent observation year are shown after the country name. For each country-specific data series, the number of observations and the most recent observation year for that data series are shown before each data series name. The source type that each data series is assigned to is given in parentheses with the data series name.

Country	Number of observations	Most recent observation year	Data series name (source type)
Afghanistan	18	2008.5	
	4	1969.4	1972 National Demographic and Family Guidance Survey (Others Indirect)
	1	2004.3	2007-2008 National Risk and Vulnerability Assessment Survey (Others Indirect)
	13	2008.5	2010 Demographic and Health Survey (DHS Direct)
Albania	21	2005.5	
	5	1996.9	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	2	2000	2002 Reproductive Health Survey (Others Direct)
	5	2002.8	2005 Multiple Indicator Cluster Survey (MICS Indirect)
	9	2005.5	2008-2009 Demographic and Health Survey (DHS Direct)
Algeria	40	2002.9	
	2	1976.5	1986 Enquête nationale sur la fécondité (Others Direct)
	6	1989.5	1992 Enquête Algérienne sur la Santé de la Mère/Enfant (Others Direct)
	2	1993	1995 Enquête nationale sur les objectifs (Others Direct)
	1	1993.8	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	10	2000	2002 PAPFAM Family Health Survey (Others Direct)
	5	2002.9	2006 Multiple Indicator Cluster Survey (MICS Indirect)
	14	2000.5	2013 WHO Vital Registration Data 2013 version (VR)
Andorra			
Angola	16	2003.7	
	5	1992	1996 Multiple Indicator Cluster Survey (MICS Indirect)
	5	1997	2001 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2002.7	2006 Malaria Indicator Survey (Other DHS Indirect)
	1	2003.7	2008-2009 Household Incomes and Expenditures Survey IBEP (Others Indirect)
Antigua and Barbuda	29	2009.5	
	29	2009.5	2013 WHO Vital Registration Data 2013 version (VR)
Argentina	72	2010.5	
	72	2010.5	2013 WHO Vital Registration Data 2013 version (VR)
Armenia	28	2007.5	
	10	1997.5	2000 Demographic and Health Survey (DHS Direct)
	10	2002.5	2005 Demographic and Health Survey (DHS Direct)
	8	2007.5	2010 Demographic and Health Survey (DHS Direct)
Australia	124	2011.5	
	124	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Austria	114	2011.5	
	114	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Azerbaijan	40	2010	
	5	1996.8	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	2	1996	2001 Reproductive Health Survey (Others Direct)
	10	2003.5	2006 Demographic and Health Survey (DHS Direct)
	23	2010	2011 Demographic and Health Survey (Other DHS Direct)
Bahamas	74	2008.5	
	74	2008.5	2013 WHO Vital Registration Data 2013 version (VR)
Bahrain	62	2009.5	
	2	1984	1989 Child Health Survey (Others Direct)
	2	1990.5	1995 GFH (Others Direct)
	58	2009.5	2013 WHO Vital Registration Data 2013 version (VR)
Bangladesh	153	2011.5	
	5	1970.1	1974 Retrospective Fertility and Mortality Survey (UN SA) (Others Indirect)
	10	1973	1975-1976 World Fertility Survey (Other DHS Direct)
	2	1981	1988-1989 Fertility Survey (Others Direct)
	12	1991	1993-1994 Demographic and Health Survey (DHS Direct)
	11	1994	1996-1997 Demographic and Health Survey (DHS Direct)
	11	1996.5	1999-2000 Demographic and Health Survey (DHS Direct)
	2	1999	2001 Maternal Health Services and Maternal Mortality Survey (Other DHS Direct)
	11	2001.5	2004 Demographic and Health Survey (DHS Direct)
	11	2004.5	2007 Demographic and Health Survey (DHS Direct)
	5	2005.1	2009 Multiple Indicator Cluster Survey (Others Indirect)
	11	2008.5	2011 Demographic and Health Survey (DHS Direct)
	1	2010.7	2011 Census (Census Direct)
	61	2011.5	2012 SVR from Report on Sample Vital Registration System 2010 (SRS)
Barbados	103	2008.5	
	103	2008.5	2013 WHO Vital Registration Data 2013 version (VR)
Belarus	60	2011.5	
	60	2011.5	2013 WHO VR 2013 adjusted version by increasing 10 percent (VR)
Belgium	114	2010.5	
	114	2010.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Belize	25	2009.5	
	5	2002	2006 Multiple Indicator Cluster Survey (MICS Indirect)
	20	2009.5	2013 WHO Vital Registration Data 2013 version (VR)
Benin	46	2004.5	
	11	1979	1981-1982 World Fertility Survey (Other DHS Direct)
	11	1994	1996 Demographic and Health Survey (DHS Direct)
	11	1998.5	2001 Demographic and Health Survey (DHS Direct)
	13	2004.5	2006 Demographic and Health Survey (DHS Direct)
Bhutan	16	2006.2	
	5	1980.6	1984 Demographic Sample Survey (Others Indirect)
	2	1983.5	1984 Demographic Sample Survey (Others Direct)
	2	1993.5	1994 National Health Survey (Others Direct)
	2	1999.7	2000 National Health Survey (Others Direct)
	5	2006.2	2010 Multiple Indicator Cluster Survey (MICS Indirect)
Bolivia (Plurinational State of)	70	2005.5	
	5	1972	1975 National Demographic Survey (Others Indirect)
	5	1976.9	1980 National Demographic Survey (Others Indirect)
	11	1986.5	1989 Demographic and Health Survey (DHS Direct)
	11	1990.5	1993-1994 Demographic and Health Survey (DHS Direct)
	11	1995.5	1998 Demographic and Health Survey (DHS Direct)
	5	1996.4	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2000.5	2003-2004 Demographic and Health Survey (DHS Direct)
	11	2005.5	2008 Demographic and Health Survey (DHS Direct)
Bosnia and Herzegovina	42	2011.5	

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Country	Number of observations	Most recent observation year	Data series name (source type)
	42	2011.5	2013 WHO Vital Registration Data 2013 version (VR)
Botswana	21	2002	
	11	1985.5	1988 Demographic and Health Survey (DHS Direct)
	5	1996	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2002	2006 Demographic Survey (Others Indirect)
Brazil	22	1993.5	
	11	1983.5	1986 Demographic and Health Survey (DHS Direct)
	11	1993.5	1996 Demographic and Health Survey (DHS Direct)
Brunei	54	2010.5	
	54	2010.5	2013 WHO Vital Registration Data 2013 version (VR)
Bulgaria	96	2011.5	
	96	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 20 percent (VR)
Burkina Faso	46	2008.5	
	11	1989.5	1992-1993 Demographic and Health Survey (DHS Direct)
	11	1996.5	1998-1999 Demographic and Health Survey (DHS Direct)
	11	2000.5	2003 Demographic and Health Survey (DHS Direct)
	13	2008.5	2010 Demographic and Health Survey (DHS Direct)
Burundi	34	2007.5	
	2	1970.5	1970 Demographic Survey (Others Direct)
	11	1984.5	1987 Demographic and Health Survey (DHS Direct)
	5	1996.7	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2002.5	2005 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2007.5	2010 Demographic and Health Survey (DHS Direct)
Cambodia	42	2007.5	
	5	1994.3	1998 Census (Census Indirect)
	12	1998.5	2000 Demographic and Health Survey (DHS Direct)
	3	2002.2	2004 Inter-censal Population Survey (Others Indirect)
	11	2002.5	2005-2006 Demographic and Health Survey (DHS Direct)
	11	2007.5	2010-2011 Demographic and Health Survey (DHS Direct)
Cameroon	59	2008.5	
	10	1975.5	1978 World Fertility Survey (Other DHS Direct)
	11	1988.5	1991 Demographic and Health Survey (DHS Direct)
	11	1995.5	1998 Demographic and Health Survey (DHS Direct)
	5	1996.1	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2002	2004 Demographic and Health Survey (DHS Direct)
	11	2008.5	2011 Demographic and Health Survey (DHS Direct)
Canada	120	2009.5	
	120	2009.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Cape Verde	2	1993.5	
	2	1993.5	1998 Reproductive Health Survey (Others Direct)
Central African Republic	26	2005.6	
	11	1991.5	1994-1995 Demographic and Health Survey (DHS Direct)
	5	1995.9	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2001.4	2006 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2005.6	2010 Multiple Indicator Cluster Survey (MICS Indirect)
Chad	36	2008.8	
	12	1994.5	1996-1997 Demographic and Health Survey (DHS Direct)
	5	1996.2	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2001.5	2004 Demographic and Health Survey (DHS Direct)
	8	2008.8	2010 Multiple Indicator Cluster Survey (MICS Indirect)
Chile	100	2009.5	
	100	2009.5	2013 WHO Vital Registration Data 2013 version (VR)
China	23	2011	
	1	1986	1987 Population Sample Survey (Others Indirect)
	10	1986	1988 National Survey on Fertility and Birth Control (Others Direct)
	12	2011	2012 Sample Vital Registration (SRS)
Colombia	65	2006.5	
	10	1983.5	1986 Demographic and Health Survey (DHS Direct)
	11	1987.5	1990 Demographic and Health Survey (DHS Direct)
	11	1992.5	1995 Demographic and Health Survey (DHS Direct)
	11	1997.5	2000 Demographic and Health Survey (DHS Direct)
	11	2001.5	2004-2005 Demographic and Health Survey (DHS Direct)
	11	2006.5	2009-2010 Demographic and Health Survey (DHS Direct)
Comoros	10	1993.5	
	10	1993.5	1996 Demographic and Health Survey (DHS Direct)
Congo	16	2004.9	
	5	1997.3	2001 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2002.5	2005 Demographic and Health Survey (DHS Direct)
	11	2004.5	2007 Demographic and Health Survey (DHS Direct)
	5	2004.9	2009 AIDS Indicator Survey (Other DHS Indirect)
	5	2005.8	2010 Multiple Indicator Cluster Survey (MICS Indirect)
Democratic Republic of the Congo	21	2005.8	
	5	1997.3	2001 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2004.5	2007 Demographic and Health Survey (DHS Direct)
	5	2005.8	2010 Multiple Indicator Cluster Survey (MICS Indirect)
Cook Islands	38	2009.5	
	5	2002.7	2006 Census (Census Indirect)
	33	2009.5	2013 WHO Vital Registration Data 2013 version (VR)
Costa Rica	90	2010.5	
	90	2010.5	2013 WHO Vital Registration Data 2013 version (VR)
Cote d'Ivoire	45	2002.5	
	2	1978.5	1978 Demographic Survey Repeated Passages (Others Direct)
	11	1978.5	1980-1981 World Fertility Survey (Other DHS Direct)
	11	1992	1994 Demographic and Health Survey (DHS Direct)
	11	1995.5	1998-1999 Demographic and Health Survey (DHS Direct)
	10	2002.5	2005 AIDS Indicator Survey (Other DHS Direct)
Croatia	60	2011.5	
	60	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Cuba	90	2010.5	
	90	2010.5	2013 WHO Vital Registration Data 2013 version (VR)
Cyprus	64	2011.5	
	64	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Czech Republic	58	2011.5	
	58	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 20 percent (VR)
Denmark	122	2011.5	
	122	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Djibouti	9	2003.4	
	4	2001.5	2002 PAPFAM Family Health Survey (Others Direct)
	5	2003.4	2006 Multiple Indicator Cluster Survey (MICS Indirect)

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Country	Number of observations	Most recent observation year	Data series name (source type)
Dominica	80	2010.5	
	10	1972.5	1975 World Fertility Survey (Other DHS Direct)
	11	1983.5	1986 Demographic and Health Survey (DHS Direct)
	11	1988.5	1991 Demographic and Health Survey (DHS Direct)
	11	1993.5	1996 Demographic and Health Survey (DHS Direct)
	5	1996.3	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	1999.5	2002 Demographic and Health Survey (DHS Direct)
	16	2004.5	2007 Demographic and Health Survey (DHS Direct)
	80	2010.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Dominican Republic	75	2004.5	
	10	1972.5	1975 World Fertility Survey (Other DHS Direct)
	11	1983.5	1986 Demographic and Health Survey (DHS Direct)
	11	1988.5	1991 Demographic and Health Survey (DHS Direct)
	11	1993.5	1996 Demographic and Health Survey (DHS Direct)
	5	1996.3	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	1999.5	2002 Demographic and Health Survey (DHS Direct)
	16	2004.5	2007 Demographic and Health Survey (DHS Direct)
Ecuador	25	1997	
	10	1976.5	1979-1980 World Fertility Survey (Other DHS Direct)
	11	1984.5	1987 Demographic and Health Survey (DHS Direct)
	2	1984	1989 Encuesta Demográfica y de Salud Materna e Infantil (ENDEMAIN) (Others Direct)
	2	1997	1999 Encuesta Demográfica y de Salud Materna e Infantil (ENDEMAIN) (Others Direct)
Egypt	110	2011.5	
	16	1979	1980 World Fertility Survey (Other DHS Direct)
	12	1986	1988-1989 Demographic and Health Survey (DHS Direct)
	4	1986.5	1991 PAPCHILD Maternal and Child Health Survey (Others Direct)
	11	1989.5	1992-1993 Demographic and Health Survey (DHS Direct)
	12	1993	1995-1996 Demographic and Health Survey (DHS Direct)
	2	1993	1997 Interim Demographic and Health Survey (Other DHS Direct)
	2	1994	1998 Interim Demographic and Health Survey (Other DHS Direct)
	11	1997.5	2000 Demographic and Health Survey (DHS Direct)
	10	2000.5	2003 Demographic and Health Survey (Other DHS Direct)
	11	2002.5	2005 Demographic and Health Survey (DHS Direct)
	11	2005.5	2008 Demographic and Health Survey (DHS Direct)
	8	2011.5	2013 WHO Vital Registration Data 2013 version (VR)
El Salvador	9	1999.5	
	5	1980.9	1985 Demographic and Health Survey (DHS Indirect)
	2	1985.5	1988 Encuesta Nacional de Salud Familiar (FESAL) (Others Direct)
	2	1999.5	2002-2003 Encuesta Nacional de Salud Familiar (FESAL) (Others Direct)
Equatorial Guinea	5	1996	
	5	1996	2000 Multiple Indicator Cluster Survey (MICS Indirect)
Eritrea	21	1999.5	
	10	1992.5	1995-1996 Demographic and Health Survey (DHS Direct)
	11	1999.5	2002 Demographic and Health Survey (DHS Direct)
Estonia	62	2011.5	
	62	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 20 percent before 1992 (VR)
Ethiopia	36	2007.5	
	2	1977.7	1981 Demographic Survey (Others Indirect)
	12	1998.5	2000 Demographic and Health Survey (DHS Direct)
	11	2002.5	2005 Demographic and Health Survey (DHS Direct)
	11	2007.5	2011 Demographic and Health Survey (DHS Direct)
Federated States of Micronesia			
Fiji	16	2009.5	
	10	1971.5	1974 World Fertility Survey (Other DHS Direct)
	6	2009.5	2013 WHO Vital Registration Data 2013 version (VR)
Finland	120	2011.5	
	120	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
France	124	2011.5	
	124	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Gabon	18	2009.5	
	8	1997.5	2000-2001 Demographic and Health Survey (DHS Direct)
	10	2009.5	2012 Demographic and Health Survey (DHS Direct)
The Gambia	10	2002	
	5	1996	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2002	2005-2006 Multiple Indicator Cluster Survey (MICS Indirect)
Georgia	9	2001.8	
	2	1995	1999-2000 Reproductive Health Survey (Others Direct)
	5	2001.8	2005 Multiple Indicator Cluster Survey (MICS Indirect)
	2	2000	2005 Reproductive Health Survey (Others Direct)
Germany	84	2011.5	
	84	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Ghana	64	2006.8	
	11	1985.5	1988 Demographic and Health Survey (DHS Direct)
	11	1990.5	1993-1994 Demographic and Health Survey (DHS Direct)
	11	1995.5	1998-1999 Demographic and Health Survey (DHS Direct)
	11	2000.5	2003 Demographic and Health Survey (DHS Direct)
	5	2002.8	2006 Multiple Indicator Cluster Survey (MICS Indirect)
	2	2002	2007 Maternal Health Survey Final (Other DHS Direct)
	11	2005.5	2008 Demographic and Health Survey (DHS Direct)
	2	2006.8	2011 Multiple Indicator Cluster Survey (MICS Direct)
Greece	112	2011.5	
	112	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 20 percent (VR)
Grenada	44	2010.5	
	44	2010.5	2013 WHO Vital Registration Data 2013 version (VR)
Guatemala	42	1995.5	
	11	1984.5	1987 Demographic and Health Survey (DHS Direct)
	5	1982.9	1987 Encuesta Nacional Sociodemográfica (Others Indirect)
	5	1985.1	1989 Encuesta Nacional Sociodemográfica (Others Indirect)
	11	1992.5	1995 Demographic and Health Survey (DHS Direct)
	10	1995.5	1998-1999 Demographic and Health Survey (Other DHS Direct)
Guinea	33	2002.5	
	5	1992.3	1996 Census (Census Indirect)
	12	1997.5	1999 Demographic and Health Survey (DHS Direct)
	5	1996	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	1995.7	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	1999	2003 Multiple Indicator Cluster Survey (Others Indirect)
	11	2002.5	2005 Demographic and Health Survey (DHS Direct)
	5	2001.9	2006 Multiple Indicator Cluster Survey (MICS Indirect)
	13	2007.5	2010 Multiple Indicator Cluster Survey (MICS Direct)

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Table 12 – continued from previous page

Country	Number of observations	Most recent observation year	Data series name (source type)
Guinea-Bissau	23	2007.5	
	5	1995.7	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2001.9	2006 Multiple Indicator Cluster Survey (MICS Indirect)
	13	2007.5	2010 Multiple Indicator Cluster Survey (MICS Direct)
Guyana	39	2006.5	
	10	1972.5	1975 World Fertility Survey (Other DHS Direct)
	5	1996.4	2000-2001 Multiple Indicator Cluster Survey (MICS Indirect)
	9	2002.5	2005 AIDS Indicator Survey (Other DHS Direct)
	5	2002	2006 Multiple Indicator Cluster Survey (MICS Indirect)
	10	2006.5	2009 Demographic and Health Survey (DHS Direct)
Haiti	53	2009.5	
	8	1974.5	1977 World Fertility Survey (Other DHS Direct)
	2	1984.5	1987 Mortality, Morbidity, and Utilization of Services Survey (Others Direct)
	11	1991.5	1994-1995 Demographic and Health Survey (DHS Direct)
	11	1997.5	2000 Demographic and Health Survey (DHS Direct)
	11	2002.5	2005-2006 Demographic and Health Survey (DHS Direct)
Honduras	10	2009.5	2012 Demographic and Health Survey (DHS Direct)
	22	2002.5	
	2	1971.5	1972 National Demographic Survey (Others Direct)
	5	1979.4	1983 National Demographic Survey (Others Indirect)
Hungary	4	1979	1987 Encuesta Nacional de Epidemiología y Salud Familiar (ENESF) (Others Direct)
	11	2002.5	2005-2006 Demographic and Health Survey (DHS Direct)
	114	2011.5	
	114	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 10 percent (VR)
Iceland	114	2011.5	
India	114	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
India	156	2011.5	
	36	1989.5	1989 Sample Registration System (SRS)
	28	1991.5	1992-1993 Demographic and Health Survey (DHS Direct)
	18	1997	1998-1999 Demographic and Health Survey (DHS Direct)
	4	1994.5	1999 District Level Household Survey (Others Indirect)
	4	1999.3	2004 District Level Household Survey (Others Indirect)
	18	2004	2005-2006 Demographic and Health Survey (DHS Direct)
	5	2003.6	2008 District Level Household Survey (Others Indirect)
	43	2011.5	2011 Sample Registration System (SRS)
	87	2006.4	
	11	1974	1976 World Fertility Survey (Other DHS Direct)
	11	1985	1987 Demographic and Health Survey (DHS Direct)
Indonesia	5	1986.9	1990 Census (Census Indirect)
	11	1989.5	1991 Demographic and Health Survey (DHS Direct)
	11	1991.5	1994 Demographic and Health Survey (DHS Direct)
	11	1994.5	1997 Demographic and Health Survey (DHS Direct)
Iran (Islamic Republic of)	11	1999.5	2002-2003 Demographic and Health Survey (DHS Direct)
	11	2004.5	2007 Demographic and Health Survey (DHS Direct)
	5	2006.4	2010 Census (Census Indirect)
	77	2008.5	
Iran (Islamic Republic of)	2	1974.5	1973-1976 Population Growth Survey (Others Direct)
	68	2000	2000 Demographic and Health Survey (Other DHS Direct)
	5	2003.1	2006 Census (Census Indirect)
	2	2008.5	2010 National Multiple-Indicator Demographic and Health Survey (Other DHS Direct)
Iraq	28	2008.5	
Iraq	2	1973.5	1973 Demographic Sample Survey and Sample Registration System (Others Direct)
Iraq	5	1986	1990 Immunization, Diarrhoeal Disease, Maternal and Child Mortality Survey (Others Indirect)
Iraq	6	2001	2004 Living Conditions Survey (Others Direct)
Ireland	124	2011.5	
Israel	124	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Italy	120	2010.5	
Jamaica	120	2010.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Japan	17	2003	
	10	1972.5	1975-1976 World Fertility Survey (Other DHS Direct)
	5	2001.4	2005 Multiple Indicator Cluster Survey (MICS Indirect)
	2	2003	2008-2009 Reproductive Health Survey (Others Direct)
Japan	124	2011.5	
Jordan	124	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Jordan	74	2004.5	
Jordan	5	1970.9	1972 Jordan Fertility Survey (Others Indirect)
Jordan	10	1973.5	1976 World Fertility Survey (Other DHS Direct)
Jordan	5	1978.5	1981 Jordan Demographic Survey (Others Indirect)
Jordan	5	1984.9	1988 EPI-CDD and Child Mortality Survey (Others Indirect)
Jordan	11	1987.5	1990 Demographic and Health Survey (DHS Direct)
Jordan	5	1987.5	1990 EPI-CDD and Child Mortality Survey (Others Indirect)
Jordan	11	1994.5	1997 Demographic and Health Survey (DHS Direct)
Jordan	11	1999.5	2002 Demographic and Health Survey (DHS Direct)
Kazakhstan	11	2004.5	2007 Demographic and Health Survey (DHS Direct)
Kazakhstan	30	2007.4	
Kenya	9	1992.5	1995 Demographic and Health Survey (DHS Direct)
Kenya	11	1996.5	1999 Demographic and Health Survey (DHS Direct)
Kenya	5	2002.4	2006 Multiple Indicator Cluster Survey (MICS Indirect)
Kenya	5	2007.4	2010-2011 Multiple Indicator Cluster Survey (MICS Indirect)
Kenya	81	2005.5	
Kiribati	11	1976	1977-1978 World Fertility Survey (Other DHS Direct)
Democratic People's Republic of Korea	11	1985.5	1988-1989 Demographic and Health Survey (DHS Direct)
Republic of Korea	70	2011.5	
Republic of Korea	10	1971.5	1974 World Fertility Survey (Other DHS Direct)
Kuwait	60	2011.5	2013 WHO Vital Registration Data 2013 version (VR)
Kuwait	77	2011.5	

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Table 12 – continued from previous page

Country	Number of observations	Most recent observation year	Data series name (source type)
	5	1987	1987 Child Health Survey (Others Indirect)
Kyrgyzstan	72	2011.5	2013 WHO Vital Registration Data 2013 version (VR)
	15	2002.5	
	10	1994.5	1997 Demographic and Health Survey (DHS Direct)
	5	2002.5	2005-2006 Multiple Indicator Cluster Survey (MICS Indirect)
Lao People's Democratic Republic	2	1989.5	
	2	1989.5	1994 Fertility and Birth Spacing Survey (Others Direct)
Latvia	64	2011.5	
	64	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 20 percent (VR)
Lebanon	20	2006.6	
	5	1992.9	1996 Population and Housing Survey (Others Indirect)
	1	1996.6	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	9	2002	2004 PAPFAM Family Health Survey (Others Direct)
	5	2006.6	2009 Multiple Indicator Cluster Survey (Others Indirect)
Lesotho	43	2006.5	
	5	1967.5	1971 Demographic Survey (Others Indirect)
	10	1974.5	1977 World Fertility Survey (Other DHS Direct)
	5	1995.8	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	1	1996.1	2001 Demographic Survey (Others Indirect)
	11	2001.5	2004-2005 Demographic and Health Survey (DHS Direct)
	11	2006.5	2009-2010 Demographic and Health Survey (DHS Direct)
Liberia	37	2006.9	
	11	1984	1986 Demographic and Health Survey (DHS Direct)
	11	2003.5	2006-2007 Demographic and Health Survey (DHS Direct)
	10	2005.5	2009 Malaria Indicator Survey (Other DHS Direct)
	5	2006.9	2011 Malaria Indicator Survey (Other DHS Indirect)
Libya	12	2005	
	2	1990	1993 PAPCHILD Maternal and Child Health Survey (Others Direct)
	10	2005	2007 PAPFAM Family Health Survey (Others Direct)
Lithuania	88	2011.5	
	88	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 10 percent (VR)
Luxembourg	91	2011.5	
	91	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Macedonia	60	2011.5	
	60	2011.5	2013 WHO Vital Registration Data 2013 version (VR)
Madagascar	48	2005.5	
	10	1989.5	1992 Demographic and Health Survey (DHS Direct)
	11	1995	1997 Demographic and Health Survey (DHS Direct)
	5	1995.8	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2000.5	2003-2004 Demographic and Health Survey (DHS Direct)
	11	2005.5	2008-2009 Demographic and Health Survey (DHS Direct)
Malawi	86	2007.5	
	2	1971	1970 Population Change Survey (Others Direct)
	5	1978.4	1982 Demographic Survey (Others Indirect)
	2	1983.5	1984 Family Formation Survey (Others Direct)
	5	1982.5	1987 Census (Census Indirect)
	11	1989.5	1992 Demographic and Health Survey (DHS Direct)
	5	1994	1998 Census (Census Indirect)
	13	1999	2000 Demographic and Health Survey (DHS Direct)
	11	2001.5	2004-2005 Demographic and Health Survey (DHS Direct)
	16	2005	2006 Multiple Indicator Cluster Survey (MICS Direct)
	16	2007.5	2010 Demographic and Health Survey (DHS Direct)
Malaysia			
Maldives	25	2011.5	
	2	1998	1997 Poverty and Vulnerability Survey (Others Indirect)
	11	2006.5	2009 Demographic and Health Survey (DHS Direct)
	12	2011.5	2013 WHO Vital Registration Data 2013 version (VR)
Mali	55	2004.5	
	10	1984.5	1987 Demographic and Health Survey (DHS Direct)
	16	1994	1995-1996 Demographic and Health Survey (DHS Direct)
	16	2000	2001 Demographic and Health Survey (DHS Direct)
	13	2004.5	2006 Demographic and Health Survey (DHS Direct)
Malta	107	2011.5	
	107	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Marshall Islands	1	2010.8	
	1	2010.8	2011 Census (Census Direct)
Mauritania	33	2003.4	
	11	1979	1981-1982 World Fertility Survey (Other DHS Direct)
	6	1985	1990 Maternal and Child Health Survey (Others Direct)
	11	1997.5	2000-2001 Demographic and Health Survey (DHS Direct)
	5	2003.4	2007 Multiple Indicator Cluster Survey (MICS Indirect)
Mauritius	110	2011.5	
	110	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Mexico	23	2010.5	
	11	1984.5	1987 Demographic and Health Survey (DHS Direct)
	12	2010.5	2013 WHO Vital Registration Data 2013 version (VR)
Republic of Moldova	11	2002.5	
	11	2002.5	2005 Demographic and Health Survey (DHS Direct)
Monaco			
Mongolia	27	2007.1	
	2	1993	1998 Reproductive Health Survey (Others Direct)
	5	1996.1	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	1999.5	2003 Reproductive Health Survey (Others Indirect)
	5	2001.7	2005 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2004.5	2008 Reproductive Health Survey (Others Indirect)
	5	2007.1	2010 Multiple Indicator Cluster Survey (MICS Indirect)
Montenegro	53	2011.5	
	53	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Morocco	66	2000.5	
	10	1977.5	1980 World Fertility Survey (Other DHS Direct)
	11	1985	1987 Demographic and Health Survey (DHS Direct)
	11	1989.5	1992 Demographic and Health Survey (DHS Direct)
	11	1992.5	1995 Demographic and Health Survey (DHS Direct)
	2	1994.5	1997 PAPG ENSME petit-échantillon (Others Direct)
	11	2000.5	2003-2004 Demographic and Health Survey (DHS Direct)
	10	2000.5	2003-2004 PAPFAM Family Health Survey (Others Direct)
Mozambique	47	2008.5	
	13	2001.5	2003-2004 Demographic and Health Survey (DHS Direct)
	19	2006.5	2008 Multiple Indicator Cluster Survey (MICS Direct)

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Table 12 – continued from previous page

Country	Number of observations	Most recent observation year	Data series name (source type)
	5	2005.1	2009 AIDS Indicator Survey (Other DHS Indirect)
	10	2008.5	2011 Demographic and Health Survey (DHS Direct)
Myanmar	10	2001	
	4	1985.5	1991 Population Change and Fertility Survey (Others Direct)
	2	1992	1997 Fertility and Reproductive Health Survey (Others Direct)
	2	1996	2001 Fertility and Reproductive Health Survey (Others Direct)
	2	2001	2007 Fertility and Reproductive Health Survey (Others Direct)
Namibia	32	2003.5	
	10	1989.5	1992 Demographic and Health Survey (DHS Direct)
	11	1997.5	2000 Demographic and Health Survey (DHS Direct)
	11	2003.5	2006-2007 Demographic and Health Survey (DHS Direct)
Nauru			
Nepal	59	2008.5	
	12	1974.5	1976 World Fertility Survey (Other DHS Direct)
	2	1986	1991 Fertility and Family Planning Survey (Others Direct)
	12	1994	1996 Demographic and Health Survey (DHS Direct)
	11	1998.5	2001 Demographic and Health Survey (DHS Direct)
	11	2003.5	2006 Demographic and Health Survey (DHS Direct)
	11	2008.5	2011 Demographic and Health Survey (DHS Direct)
Netherlands	124	2011.5	
	124	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
New Zealand	122	2010.5	
	122	2010.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Nicaragua	38	2004	
	5	1981.3	1985 Encuesta Socio-demografica Nicaraguense (Others Indirect)
	5	1990.3	1995 Census (Census Indirect)
	11	1994.5	1997-1998 Demographic and Health Survey (DHS Direct)
	11	1998.5	2001 Demographic and Health Survey (DHS Direct)
	5	2000.5	2005 Census (Census Indirect)
	1	2004	2006 Demographic and Health Survey (Other DHS Direct)
Niger	46	2007.5	
	11	1987.5	1990 Demographic and Health Survey (DHS Direct)
	11	1990.5	1992 Demographic and Health Survey (DHS Direct)
	13	1996.5	1998 Demographic and Health Survey (DHS Direct)
	5	1995.8	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2000.5	2003 Demographic and Health Survey (DHS Direct)
	11	2004	2006 Demographic and Health Survey (DHS Direct)
	22	2007.5	2008 Demographic and Health Survey (DHS Direct)
	6	2007.5	2010 Child Survival and Mortality Survey New (Others Direct)
	10	2007.5	2010 Malaria Indicator Survey (Other DHS Direct)
Nigeria	54	2007.5	
	11	1987.5	1990 Demographic and Health Survey (DHS Direct)
	11	2000.5	2003 Demographic and Health Survey (DHS Direct)
	22	2007.5	2008 Demographic and Health Survey (DHS Direct)
	10	2007.5	2010 Malaria Indicator Survey (Other DHS Direct)
Niue	2	2002.5	
	2	2002.5	2013 WHO Vital Registration Data 2013 version (VR)
Norway	122	2011.5	
	122	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Oman	8	1990	
	6	1983.5	1988 Child Health Survey (Others Direct)
	2	1990	1995 Family Health Survey (Others Direct)
Pakistan	115	2007.5	
	2	1964	1962-1965 Population Growth Estimation Experiment (VR)
	2	1969.5	1971 Population Growth Survey I (Others Direct)
	11	1973.5	1975 World Fertility Survey (Other DHS Direct)
	2	1977	1976-1978 Population Growth Survey II (Others Direct)
	2	1986	1988 Demographic Survey (Others Direct)
	11	1987.5	1990-1991 Demographic and Health Survey (DHS Direct)
	5	1992	1996 Integrated Household Survey (Others Indirect)
	5	1993.2	1998 Census (Census Indirect)
	11	1995.5	1998 Integrated Household Survey (Others Direct)
	2	1999	2000-2001 Reproductive Health and Family Planning Survey (Others Direct)
	11	1997.5	2001 Integrated Household Survey (Others Direct)
	11	2004	2006-2007 Demographic and Health Survey (DHS Direct)
	34	2003.5	2008 Pakistan Demographic Survey (VR)
	6	2007.5	2008 Pakistan Demographic Survey (Others Direct)
Palau	28	2005.5	
	28	2005.5	2013 WHO Vital Registration Data 2013 version (VR)
Panama	10	1972.5	
	10	1972.5	1975-1976 World Fertility Survey (Other DHS Direct)
Papua New Guinea			
Paraguay	24	1999.5	
	11	1976.5	1979 World Fertility Survey (Other DHS Direct)
	11	1987.5	1990 Demographic and Health Survey (DHS Direct)
	2	1999.5	2004 Reproductive Health Survey (Others Direct)
Peru	67	2000.5	
	11	1975	1977-1978 World Fertility Survey (Other DHS Direct)
	11	1983.5	1986 Demographic and Health Survey (DHS Direct)
	11	1988.5	1991-1992 Demographic and Health Survey (DHS Direct)
	12	1994.5	1996 Demographic and Health Survey (DHS Direct)
	11	1997.5	2000 Demographic and Health Survey (DHS Direct)
	11	2000.5	2004-2008 Demographic and Health Survey (DHS Direct)
Philippines	55	2005.5	
	11	1975.5	1978 World Fertility Survey (Other DHS Direct)
	11	1990.5	1993 Demographic and Health Survey (DHS Direct)
	11	1995.5	1998 Demographic and Health Survey (DHS Direct)
	11	2000.5	2003 Demographic and Health Survey (DHS Direct)
	11	2005.5	2008 Demographic and Health Survey (DHS Direct)
Poland	106	2011.5	
	106	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Portugal	114	2011.5	
	114	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Qatar	40	2010.5	
	40	2010.5	2013 WHO Vital Registration Data 2013 version (VR)
Romania	82	2010.5	
	82	2010.5	2013 WHO Good VR 2013 adjusted version by increasing 20 percent (VR)
Russian Federation	62	2010.5	
	62	2010.5	2013 WHO VR 2013 adjusted version by increasing 20 percent (VR)

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Table 12 – continued from previous page

Country	Number of observations	Most recent observation year	Data series name (source type)
Rwanda	76	2007.5	
	11	1981	1983 World Fertility Survey (Other DHS Direct)
	5	1988.1	1991 Census (Census Indirect)
	11	1989.5	1992 Demographic and Health Survey (DHS Direct)
	12	1998.5	2000 Demographic and Health Survey (DHS Direct)
	5	1999	2002 Census (Census Indirect)
	11	2003	2005 Demographic and Health Survey (DHS Direct)
	10	2004.5	2007-2008 Interim Demographic and Health Survey (Other DHS Direct)
	11	2007.5	2010 Demographic and Health Survey (DHS Direct)
Saint Kitts and Nevis	60	2005.5	
	60	2005.5	2013 WHO Vital Registration Data 2013 version (VR)
Saint Lucia	71	2006.5	
	71	2006.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Samoa	6	2011.4	
	2	1999	1999 Demographic and Health Survey (Other DHS Indirect)
	2	1995	2000 Demographic and Vital Statistics Survey (Others Indirect)
	2	2011.4	2011 Population and Housing Census (Census Direct)
San Marino	15	2003.5	
	15	2003.5	2013 WHO Vital Registration Data 2013 version (VR)
Sao Tome and Principe	16	2005.5	
	5	1995.9	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2005.5	2008-2009 Demographic and Health Survey (DHS Direct)
Saudi Arabia	14	2009.5	
	4	1985	1987 Child Health Survey (Others Indirect)
	2	1998.6	1999 Demographic Survey (Others Direct)
	2	1999.6	2000 Demographic Survey (Others Direct)
	2	2004.2	2004 Census (Census Direct)
	2	2006.6	2007 Demographic Survey (Others Direct)
	2	2009.5	2013 WHO Vital Registration Data 2013 version (VR)
Senegal	92	2007.5	
	11	1975.5	1978 World Fertility Survey (Other DHS Direct)
	11	1983.5	1986 Demographic and Health Survey (DHS Direct)
	11	1989.5	1992-1993 Demographic and Health Survey (DHS Direct)
	11	1994.5	1997 Demographic and Health Survey (DHS Direct)
	11	1997	1999 Demographic and Health Survey (DHS Direct)
	11	2003	2005 Demographic and Health Survey (DHS Direct)
	5	2003	2006 Malaria Indicator Survey (Other DHS Indirect)
	10	2005.5	2008-2009 Malaria Indicator Survey (Other DHS Direct)
	11	2007.5	2010-2011 Demographic and Health Survey (DHS Direct)
Serbia	54	2011.5	
	54	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Seychelles	74	2011.5	
	74	2011.5	2013 WHO Vital Registration Data 2013 version (VR)
Sierra Leone	25	2006.1	
	5	1995.3	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	1996.9	2004 Census (Census Indirect)
	5	2001	2005-2006 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2006.1	2010 Multiple Indicator Cluster Survey (MICS Indirect)
Singapore	114	2011.5	
	114	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Slovakia	60	2011.5	
	60	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 20 percent (VR)
Slovenia	60	2011.5	
	60	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Solomon Islands			
Somalia	11	2004	
	1	1999.1	1999 Multiple Indicator Cluster Survey (MICS Indirect)
	10	2004	2006 Multiple Indicator Cluster Survey (MICS Direct)
South Africa	11	2006.7	
	10	1995.5	1998 Demographic and Health Survey (DHS Direct)
	1	2006.7	2007 Community Survey (Others Direct)
South Sudan			
Spain	122	2011.5	
	122	2011.5	2013 WHO Good VR 2013 adjusted version by increasing 20 percent (VR)
Sri Lanka	69	2007.5	
	10	1972.5	1975 World Fertility Survey (Other DHS Direct)
	11	1984.5	1987 Demographic and Health Survey (DHS Direct)
	48	2007.5	2013 WHO Vital Registration Data 2013 version (VR)
State of Palestine	28	2008.1	
	2	1992.5	1995 Demographic Survey (Others Direct)
	2	1997.5	2000 Health Survey (Others Direct)
	12	2005	2006 PAPFAM Family Health Survey (Others Direct)
	10	2008.1	2010 Multiple Indicator Cluster Survey-Family Health Survey (MICS Direct)
	2	2008	2011 Palestinian Family Survey (Others Direct)
Saint Vincent and the Grenadines	68	2009.5	
	68	2009.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Sudan	38	2007.5	
	10	1975.5	1978-1979 World Fertility Survey (Other DHS Direct)
	11	1986.5	1989-1990 Demographic and Health Survey (DHS Direct)
	5	1986.5	1990 Demographic and Health Survey (DHS Indirect)
	2	1995	1999 Safe Motherhood Survey (Others Direct)
	10	2007.5	2010 Sudan Household Health Survey (MICS Direct)
Suriname	10	2002	
	5	1995.2	1999-2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2002	2006 Multiple Indicator Cluster Survey (MICS Indirect)
Swaziland	28	2007.5	
	5	1995.9	1999-2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2003.5	2006-2007 Demographic and Health Survey (DHS Direct)
	12	2007.5	2010 Multiple Indicator Cluster Survey (MICS Direct)
Sweden	122	2011.5	
	122	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Switzerland	122	2011.5	
	122	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Syria	33	2002.7	
	11	1976	1978 World Fertility Survey (Other DHS Direct)
	5	1986.6	1990 EPI/CDD and Child Mortality Survey (Others Indirect)
	12	1999	2001 PAPFAM Family Health Survey (Others Direct)
	5	2002.7	2006 Multiple Indicator Cluster Survey (MICS Indirect)

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Table 12 – continued from previous page

Country	Number of observations	Most recent observation year	Data series name (source type)
Tajikistan	10	2002.5	
	5	1996.7	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2002.5	2005 Multiple Indicator Cluster Survey (MICS Indirect)
Tanzania	65	2006.5	
	5	1984.2	1988 Census (Census Indirect)
	11	1988.5	1991-1992 Demographic and Health Survey (DHS Direct)
	11	1994	1996 Demographic and Health Survey (DHS Direct)
	11	1996.5	1999 Demographic and Health Survey (DHS Direct)
	5	1998	2002 Census (Census Indirect)
	11	2001.5	2004-2005 Demographic and Health Survey (DHS Direct)
	11	2006.5	2009-2010 Demographic and Health Survey (DHS Direct)
Thailand	38	2001.5	
	2	1975	1974-1975 Survey of Population Change (Others Direct)
	10	1972.5	1975 World Fertility Survey (Other DHS Direct)
	2	1985	1985-1986 Survey of Population Change (Others Direct)
	11	1984.5	1987 Demographic and Health Survey (DHS Direct)
	4	1991	1989 Survey of Population Change (Others Direct)
	9	2001.5	2005-2006 Multiple Indicator Cluster Survey (MICS Indirect)
Timor Leste	13	2006.5	
	1	1999.6	2002 Multiple Indicator Cluster Survey (Others Indirect)
	2	1999	2003 Demographic and Health Survey (Other DHS Direct)
	10	2006.5	2009-2010 Demographic and Health Survey (DHS Direct)
Togo	32	2006.8	
	11	1985.5	1988 Demographic and Health Survey (DHS Direct)
	11	1996	1998 Demographic and Health Survey (DHS Direct)
	5	2002.3	2006 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2006.8	2010 Multiple Indicator Cluster Survey (MICS Indirect)
Tonga			
Trinidad and Tobago	31	2002.4	
	10	1974.5	1977 World Fertility Survey (Other DHS Direct)
	11	1984.5	1987 Demographic and Health Survey (DHS Direct)
	5	1996.4	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2002.4	2006 Multiple Indicator Cluster Survey (MICS Indirect)
Tunisia	32	2009.6	
	10	1985.5	1988 Demographic and Health Survey (DHS Direct)
	10	1992.4	1994 PAPCHILD Maternal and Child Health Survey (Others Direct)
	10	1999	2001 PAPFAM Family Health Survey (Others Direct)
	2	2009.6	2011-2012 Multiple Indicator Cluster Survey (MICS Direct)
Turkey	39	2003.8	
	10	1975.5	1978 World Fertility Survey (Other DHS Direct)
	5	1985.8	1989 Demographic Survey (Others Indirect)
	11	1990.5	1993 Demographic and Health Survey (DHS Direct)
	11	1995.5	1998 Demographic and Health Survey (DHS Direct)
	2	2003.8	2008 Demographic and Health Survey (Other DHS Direct)
Turkmenistan	5	2002.4	
	5	2002.4	2006 Multiple Indicator Cluster Survey (MICS Indirect)
Tuvalu	26	2005.5	
	2	2000.3	2002 Census (Census Direct)
	2	2002.7	2007 Demographic and Health Survey (Other DHS Direct)
	22	2005.5	2013 WHO Vital Registration Data 2013 version (VR)
Uganda	65	2008.5	
	11	1985.5	1988-1989 Demographic and Health Survey (DHS Direct)
	11	1992.5	1995 Demographic and Health Survey (DHS Direct)
	11	1998	2000-2001 Demographic and Health Survey (DHS Direct)
	11	2004	2006 Demographic and Health Survey (DHS Direct)
	10	2007.5	2009 Malaria Indicator Survey (Other DHS Direct)
	11	2008.5	2011 Demographic and Health Survey (DHS Direct)
Ukraine	80	2011.5	
	2	1995	1999 Reproductive Health Survey (Others Direct)
	5	2002.9	2005 Multiple Indicator Cluster Survey (MICS Indirect)
	11	2004.5	2007 Demographic and Health Survey (DHS Direct)
	62	2011.5	2013 WHO Vital Registration Data 2013 version (VR)
United Arab Emirates	7	1991	
	5	1987	1987 Child Health Survey (Others Indirect)
	2	1991	1995 Family Health Survey (Others Direct)
United Kingdom	124	2011.5	
	124	2011.5	2013 WHO Good Vital Registration Data 2013 version (VR)
United States of America	118	2008.5	
	118	2008.5	2013 WHO Good Vital Registration Data 2013 version (VR)
Uruguay	100	2009.5	
	100	2009.5	2013 WHO Vital Registration Data 2013 version (VR)
Uzbekistan	10	2003.1	
	5	1996.9	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	5	2003.1	2006 Multiple Indicator Cluster Survey (MICS Indirect)
Vanuatu	5	2003.2	
	5	2003.2	2007-2008 Multiple Indicator Cluster Survey (MICS Indirect)
Venezuela (Bolivarian Republic of)	12	1995.5	
	10	1974.5	1977 World Fertility Survey (Other DHS Direct)
	2	1995.5	1998 Encuesta Nacional de Poblacion y Familia (Others Direct)
Vietnam	37	1999.5	
	5	1985.5	1988 National Demographic and Health Survey (Other DHS Direct)
	2	1988.5	1994 Intercensal Demographic Survey (Others Direct)
	11	1994.5	1997 Demographic and Health Survey (DHS Direct)
	3	1993.4	1998 Vietnam Longitudinal Survey (VLSS) (Others Direct)
	5	1997	2000 Multiple Indicator Cluster Survey (MICS Indirect)
	11	1999.5	2002 Demographic and Health Survey (DHS Direct)
Yemen	48	2003.5	
	8	1977	1979 World Fertility Survey (Other DHS Direct)
	12	1989.5	1991-1992 Demographic and Health Survey (DHS Direct)
	14	1996	1997 Demographic and Health Survey (DHS Direct)
	2	1997	2003 PAPFAM Family Health Survey (Others Direct)
	12	2003.5	2006 Multiple Indicator Cluster Survey (MICS Direct)
Zambia	46	2010.3	
	11	1990	1992 Demographic and Health Survey (DHS Direct)
	11	1994.5	1996-1997 Demographic and Health Survey (DHS Direct)
	11	1999.5	2001-2002 Demographic and Health Survey (DHS Direct)
	11	2004.5	2007 Demographic and Health Survey (DHS Direct)
	2	2010.3	2010 Census (Census Direct)
Zimbabwe	59	2007.5	

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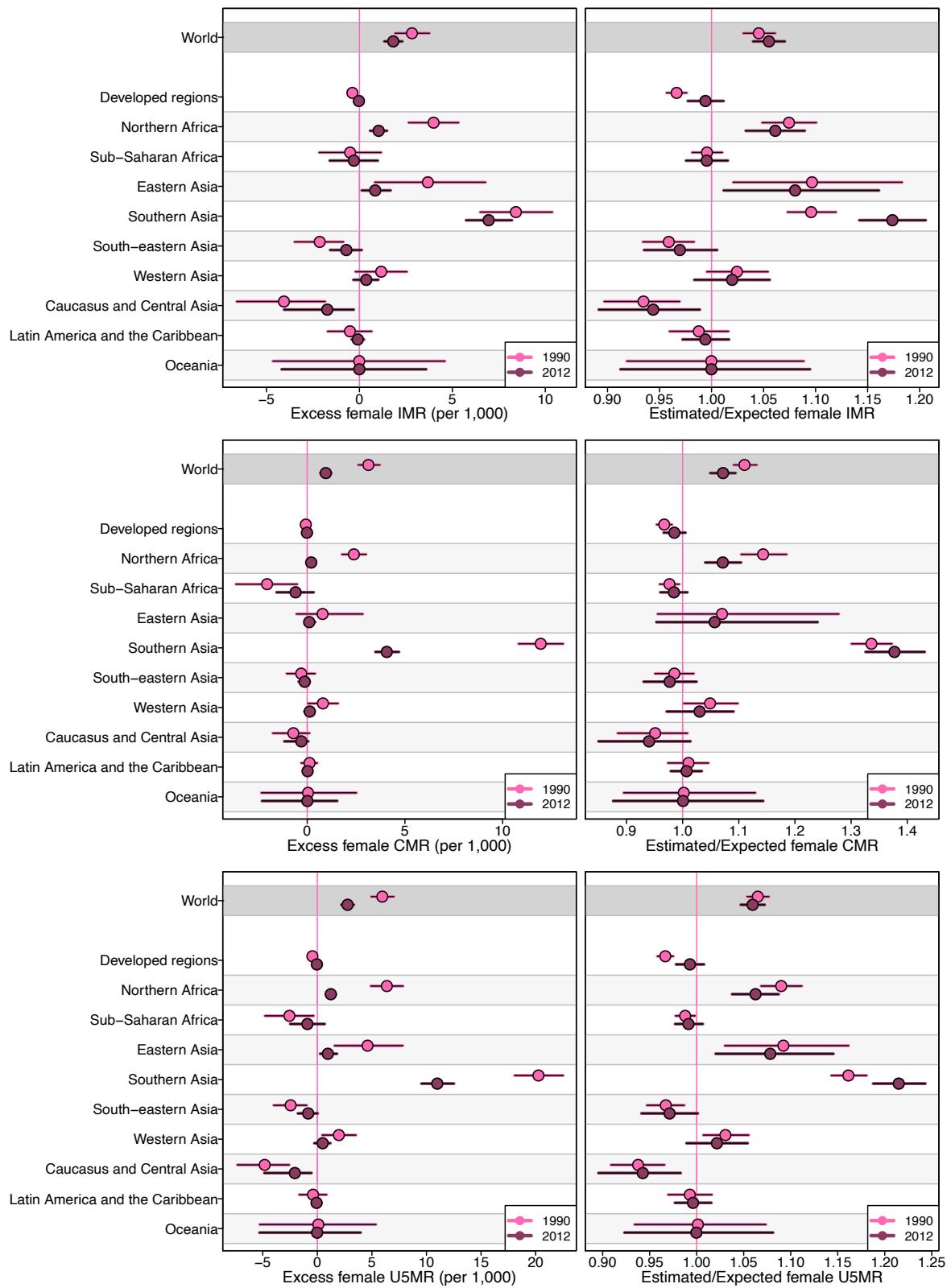
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Country	Number of observations	Most recent observation year	Data series name (source type)
	1	1985.6	1987 Inter-censal Demographic Survey (Others Indirect)
	11	1985.5	1988-1989 Demographic and Health Survey (DHS Direct)
	11	1991.5	1994 Demographic and Health Survey (DHS Direct)
	2	1997	1997 Inter-censal Demographic Survey (Others Indirect)
	11	1996.5	1999 Demographic and Health Survey (DHS Direct)
	12	2006.5	2009 Multiple Indicator Cluster Survey (MICS Direct)
	11	2007.5	2010-2011 Demographic and Health Survey (DHS Direct)

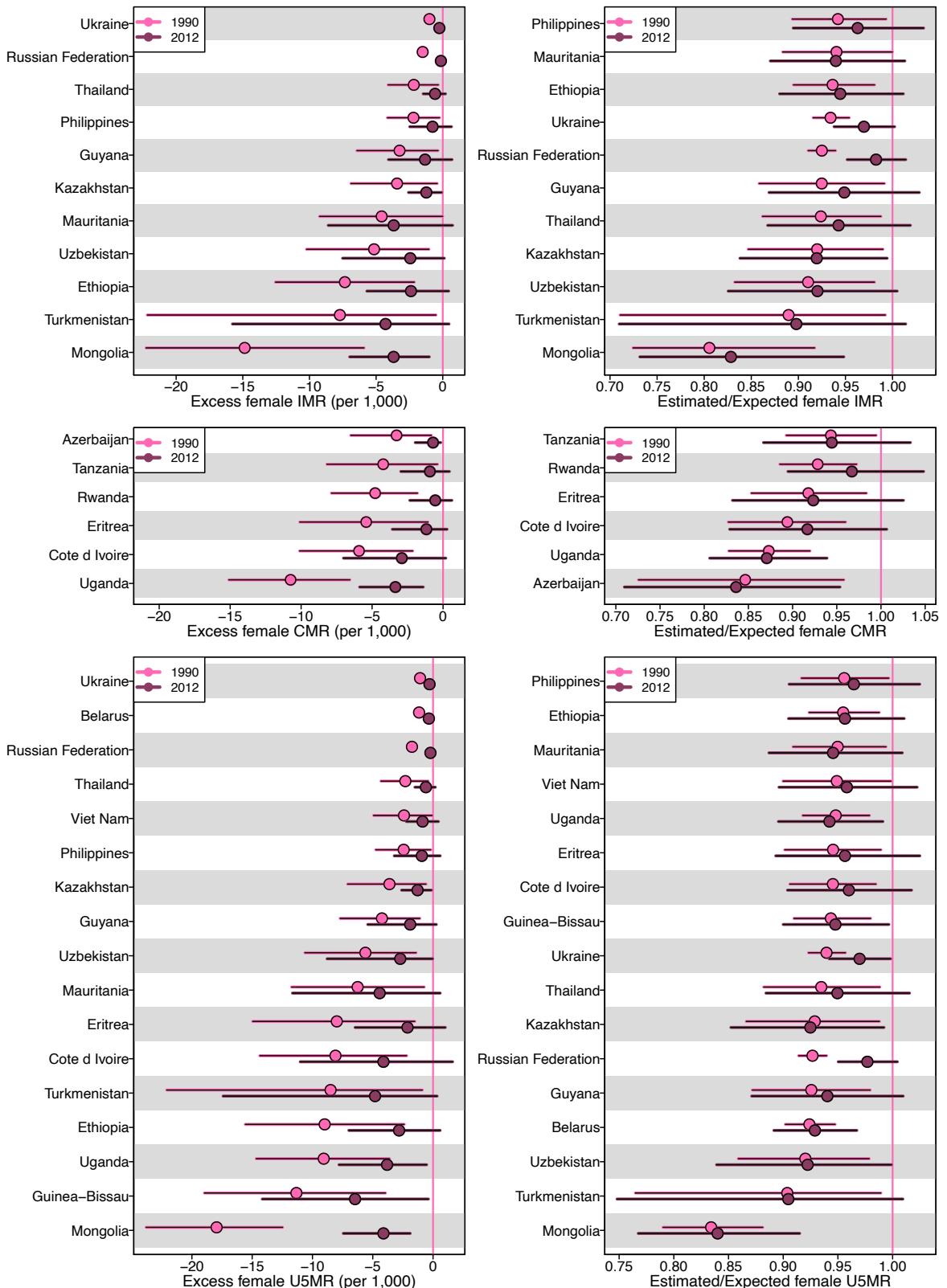
MDG region	Country
Developed regions	Albania; Andorra; Australia; Austria; Belarus; Belgium; Bosnia and Herzegovina; Bulgaria; Canada; Croatia; Cyprus; Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Iceland; Ireland; Israel; Italy; Japan; Latvia; Lithuania; Luxembourg; Macedonia; Malta; Republic of Moldova; Monaco; Montenegro; Netherlands; New Zealand; Norway; Poland; Portugal; Romania; Russian Federation; San Marino; Serbia; Slovakia; Slovenia; Spain; Sweden; Switzerland; Ukraine; United Kingdom; United States of America
Northern Africa	Algeria; Egypt; Libya; Morocco; Tunisia
Sub-Saharan Africa	Angola; Benin; Botswana; Burkina Faso; Burundi; Cameroon; Cape Verde; Central African Republic; Chad; Comoros; Congo; Democratic Republic of the Congo; Cote d'Ivoire; Djibouti; Equatorial Guinea; Eritrea; Ethiopia; Gabon; The Gambia; Ghana; Guinea; Guinea-Bissau; Kenya; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Mauritius; Mozambique; Namibia; Niger; Nigeria; Rwanda; Sao Tome and Principe; Senegal; Seychelles; Sierra Leone; Somalia; South Africa; South Sudan; Sudan; Swaziland; Tanzania; Togo; Uganda; Zambia; Zimbabwe
Eastern Asia	China; Democratic People's Republic of Korea; Republic of Korea; Mongolia
Southern Asia	Afghanistan; Bangladesh; Bhutan; India; Iran (Islamic Republic of); Maldives; Nepal; Pakistan; Sri Lanka
South-eastern Asia	Brunei; Cambodia; Indonesia; Lao People's Democratic Republic; Malaysia; Myanmar; Philippines; Singapore; Thailand; Timor Leste; Vietnam
Western Asia	Bahrain; Iraq; Jordan; Kuwait; Lebanon; Oman; Qatar; Saudi Arabia; State of Palestine; Syria; Turkey; United Arab Emirates; Yemen
Caucasus and Central Asia	Armenia; Azerbaijan; Georgia; Kazakhstan; Kyrgyzstan; Tajikistan; Turkmenistan; Uzbekistan
Latin America and the Caribbean	Antigua and Barbuda; Argentina; Bahamas; Barbados; Belize; Bolivia (Plurinational State of); Brazil; Chile; Colombia; Costa Rica; Cuba; Dominica; Dominican Republic; Ecuador; El Salvador; Grenada; Guatemala; Guyana; Haiti; Honduras; Jamaica; Mexico; Nicaragua; Panama; Paraguay; Peru; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Suriname; Trinidad and Tobago; Uruguay; Venezuela (Bolivarian Republic of)
Oceania	Cook Islands; Federated States of Micronesia; Fiji; Kiribati; Marshall Islands; Nauru; Niue; Palau; Papua New Guinea; Samoa; Solomon Islands; Tonga; Tuvalu; Vanuatu

Table 13: **Classification of countries by MDG region.**

## **6 SUPPLEMENTARY FIGURES**



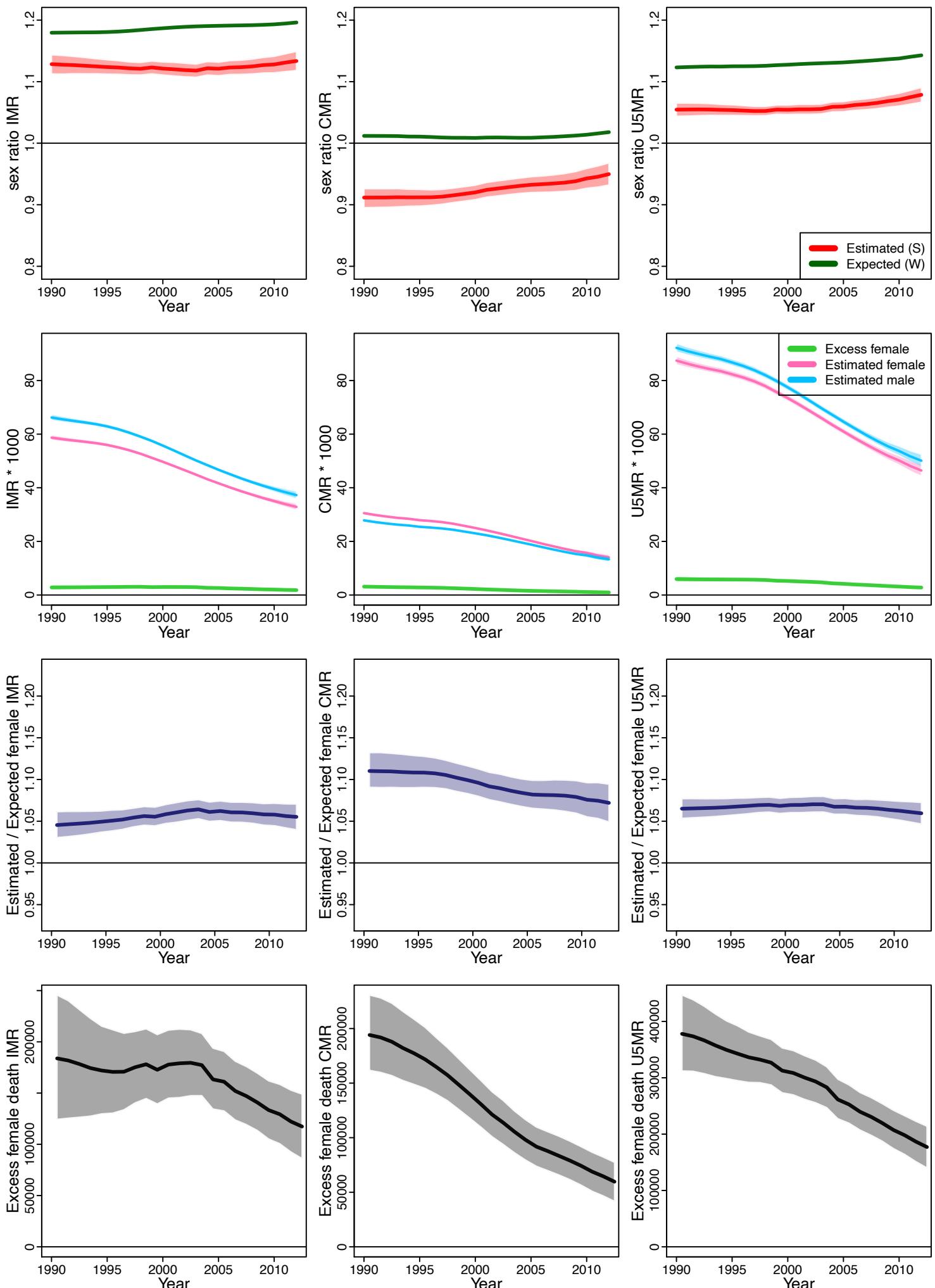
**Figure 5: Overview of excess female mortality (left) and the ratio of estimated to expected mortality (right) for the world and MDG regions in 1990 and 2012, for IMR, CMR, and U5MR respectively. Dots indicate median estimates, and horizontal lines refer to 90% uncertainty intervals.**



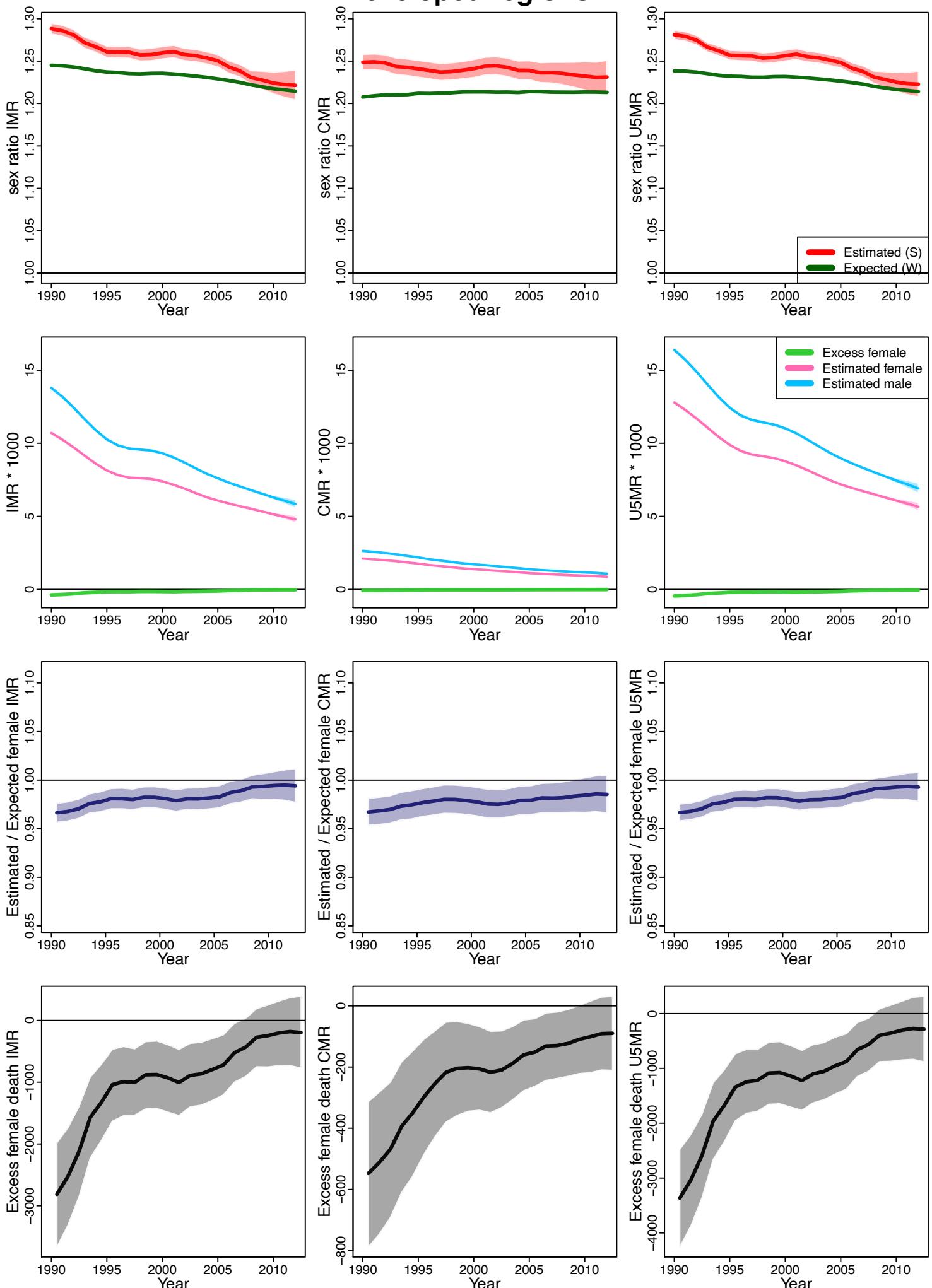
**Figure 6: Overview of excess female mortality (left) and the ratio of estimated to expected mortality (right) for countries with outlying sex ratios and lower-than-expected female mortality in 1990 and/or 2012, for IMR, CMR, and U5MR respectively.** Countries are ordered by decreasing point estimates for the year 1990. Dots indicate median estimates, and horizontal lines refer to 90% uncertainty intervals.

Figure 7: **Overview of global, MDG regional, and country-specific estimates by age group.** First row: Estimated sex ratio  $S$  (red) and expected sex ratio  $W$  (green). For country-specific estimates, observations are displayed by dots. Shaded areas around observations illustrate sampling errors (where available) and different colors differentiate data series. Second row: Excess female mortality (green), female mortality (pink), and male mortality (blue). Third row: the ratio of estimated to expected female mortality. Fourth row: Number of excess female deaths. Results for age groups [0,1), [1,5) and [0,5) are displayed in the first, second and last column, respectively. Shaded areas around the estimates illustrate the 90% uncertainty intervals.

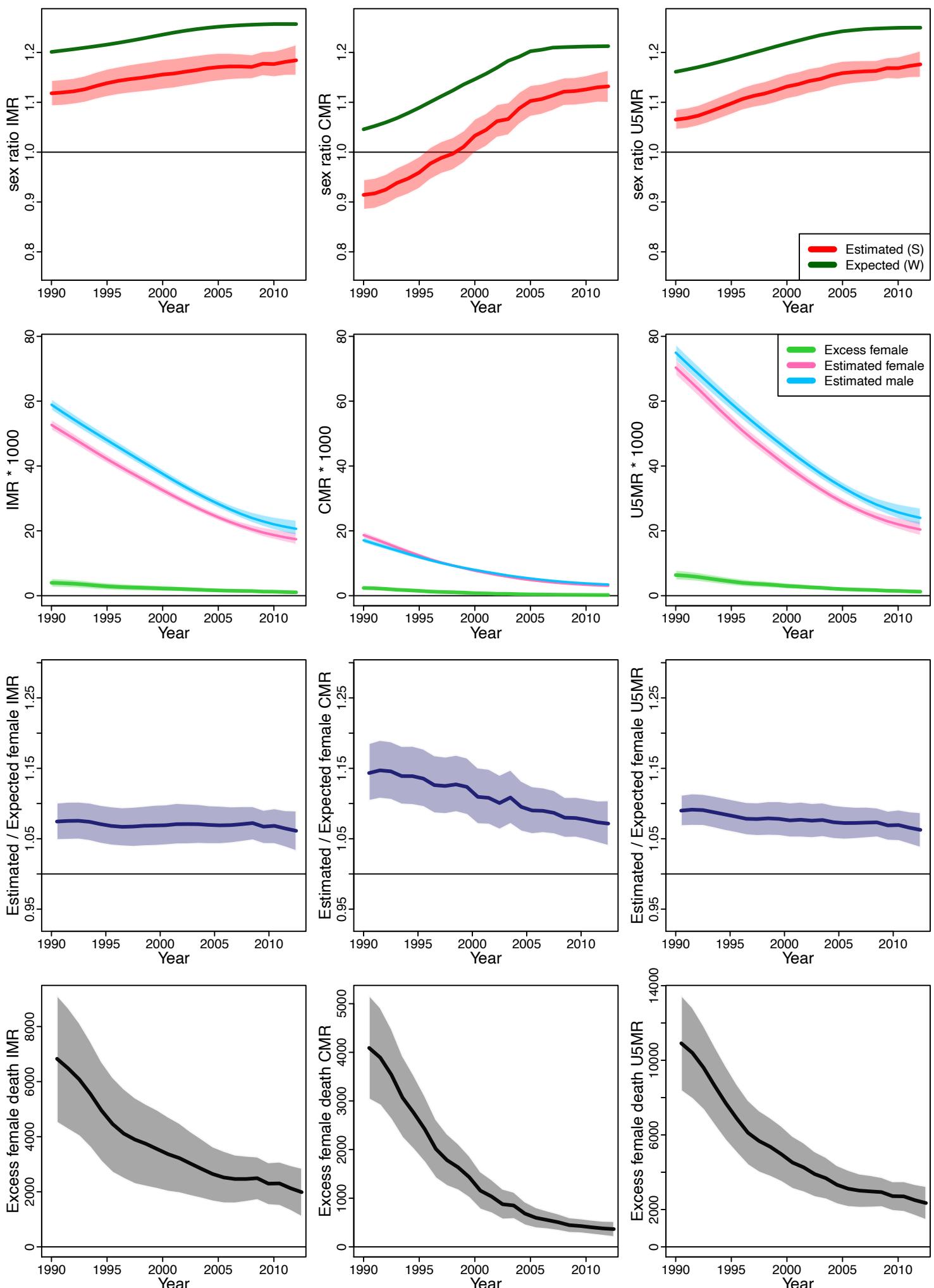
# World



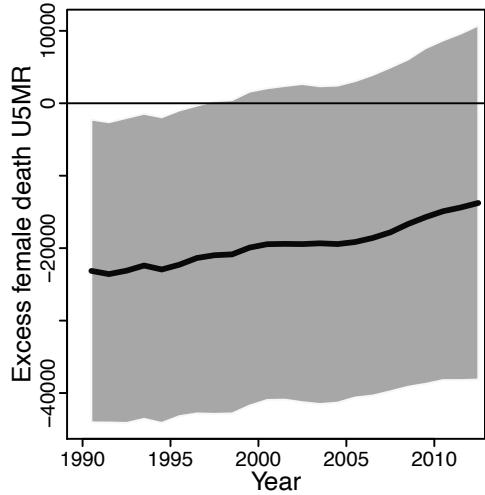
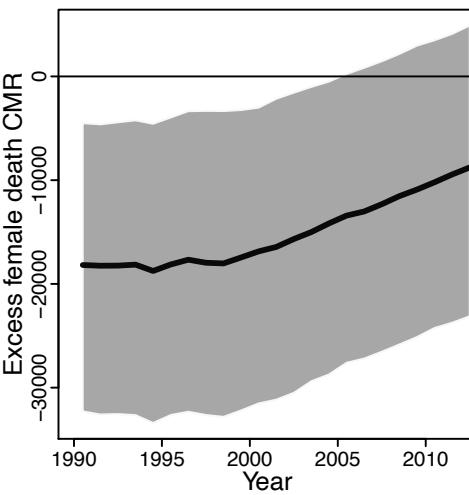
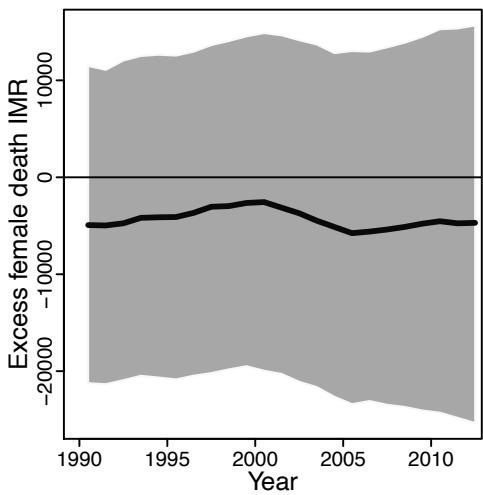
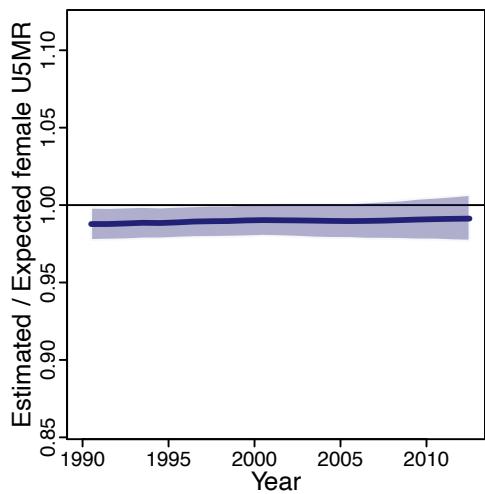
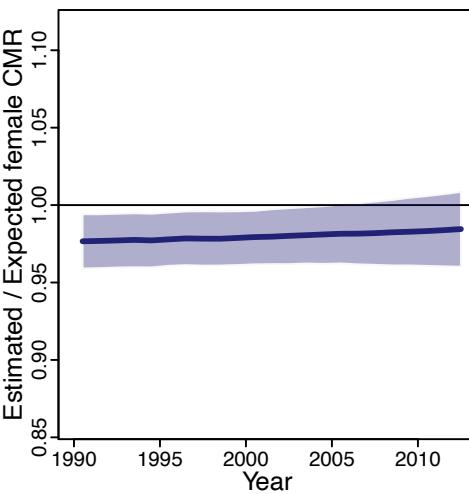
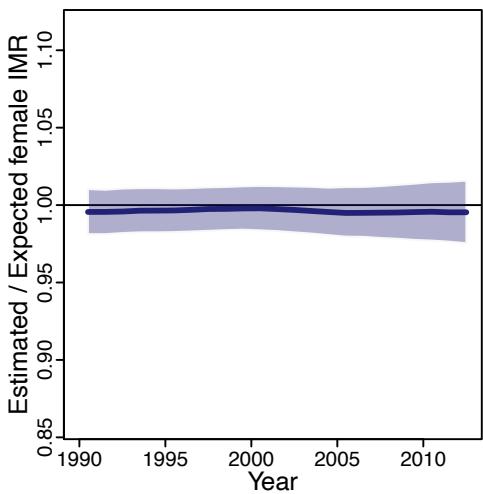
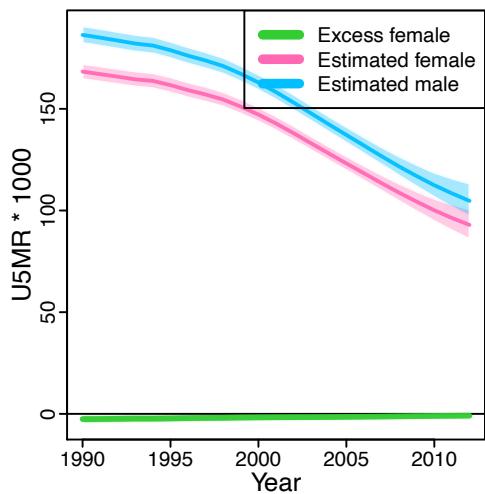
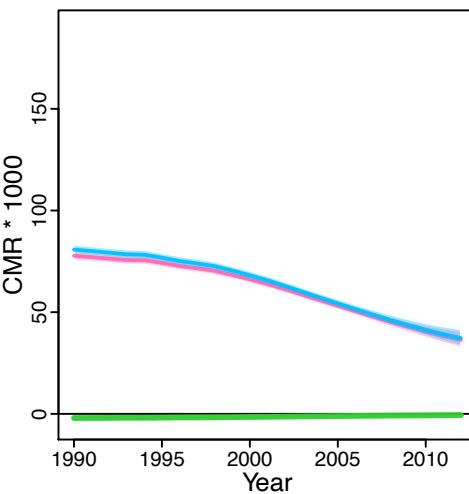
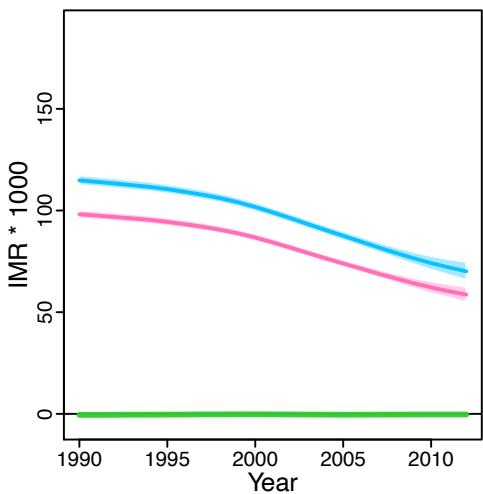
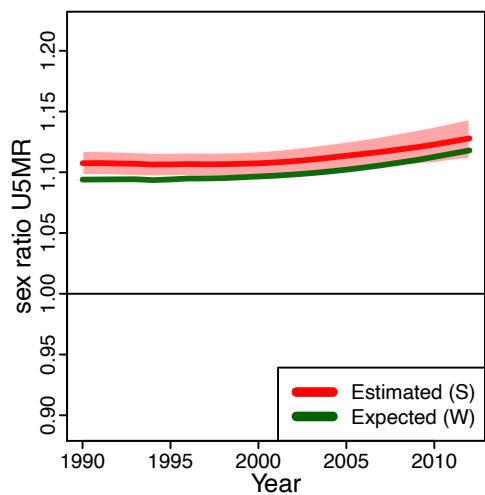
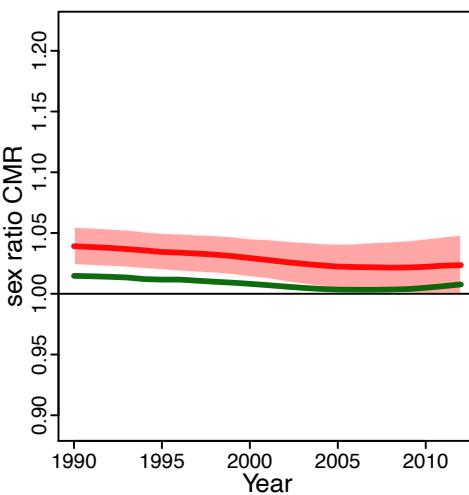
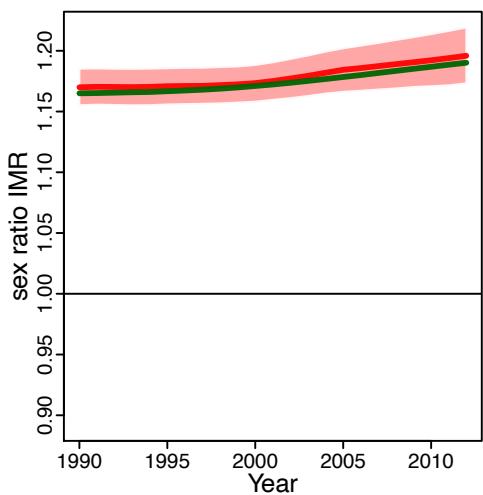
# Developed regions



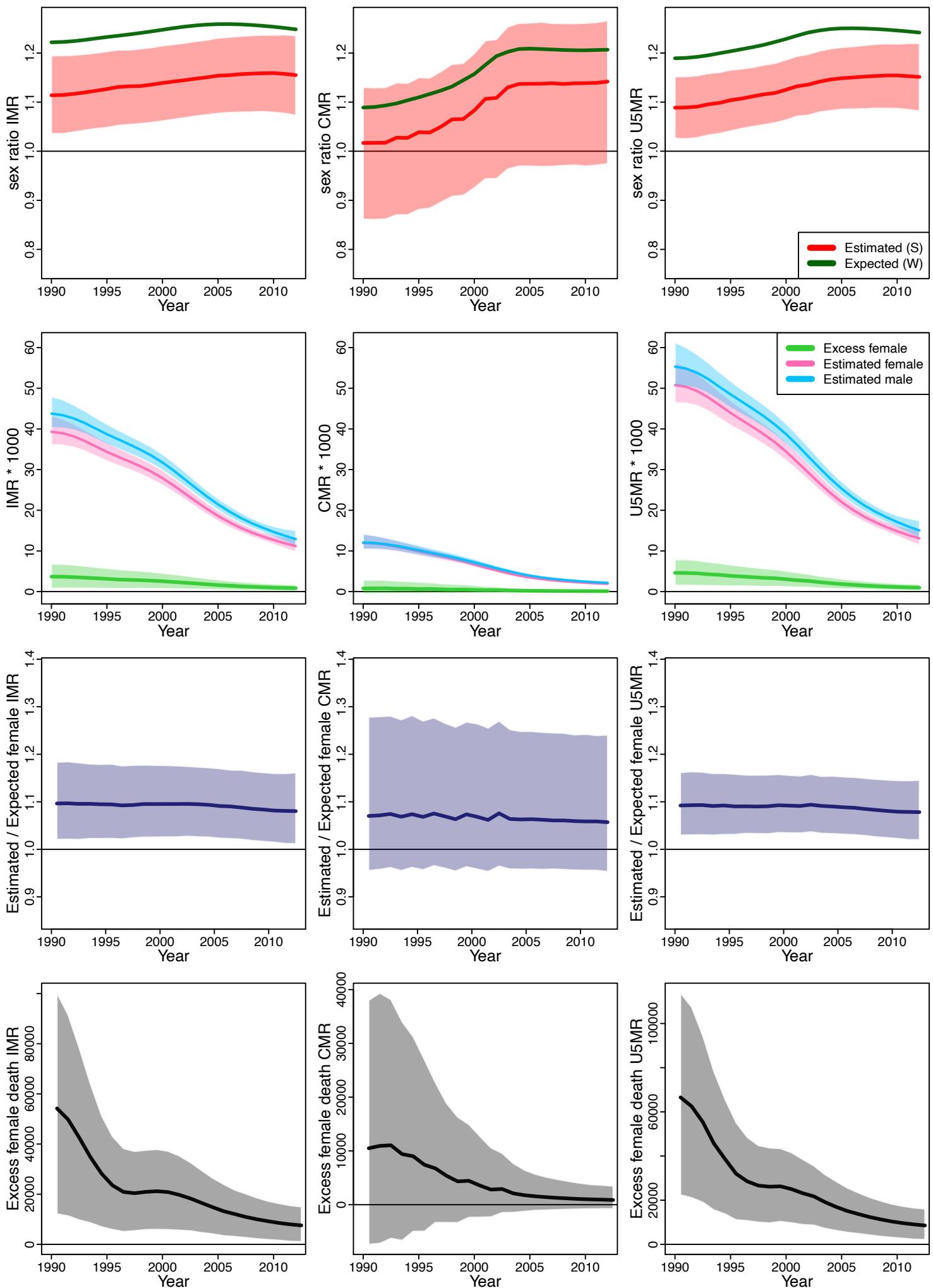
# Northern Africa



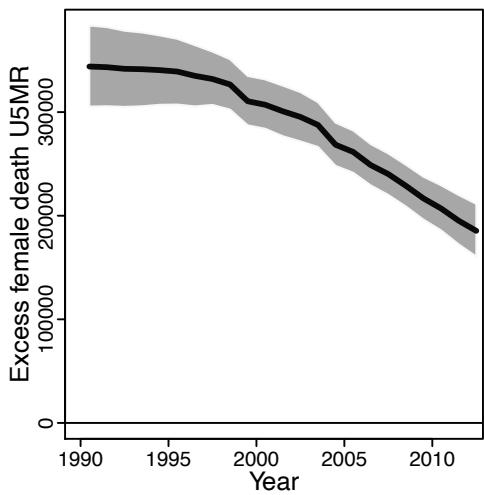
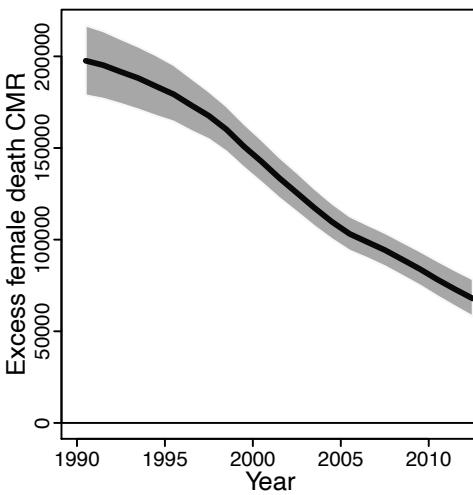
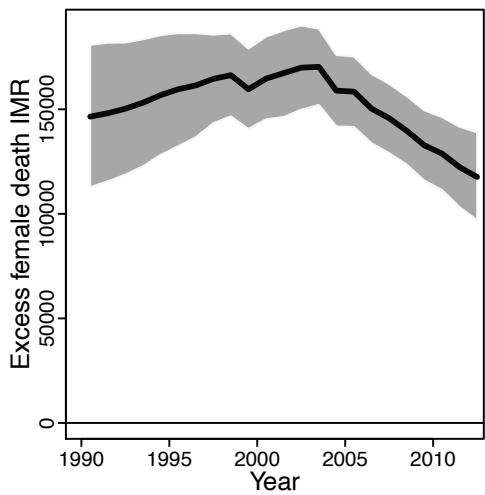
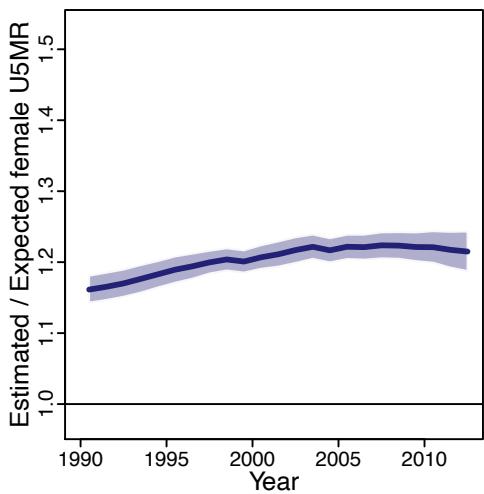
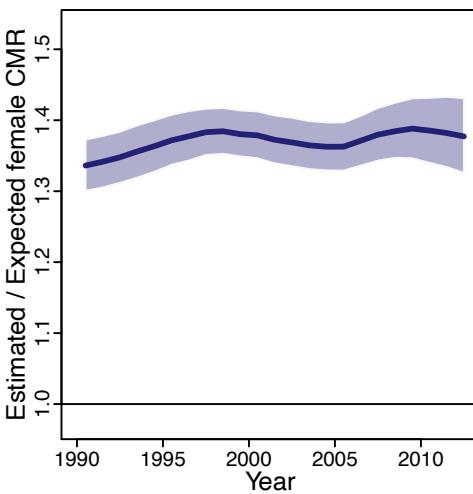
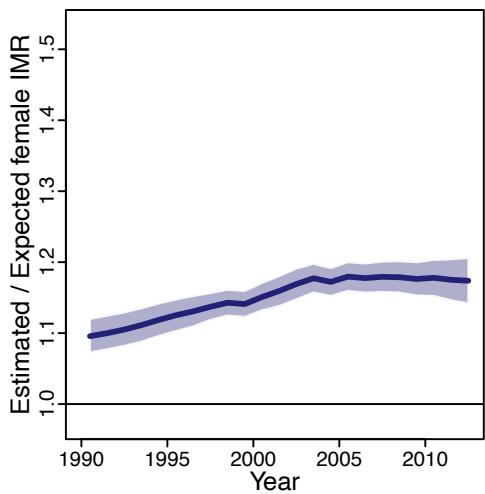
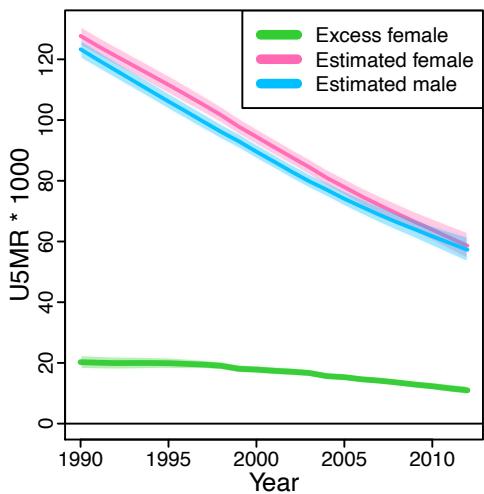
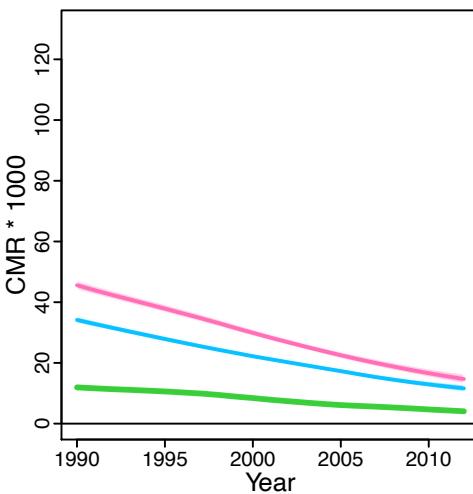
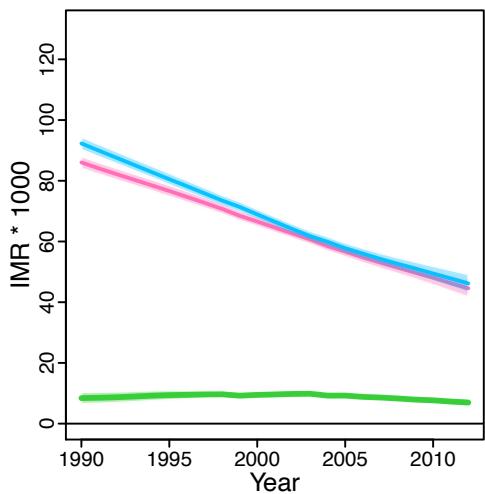
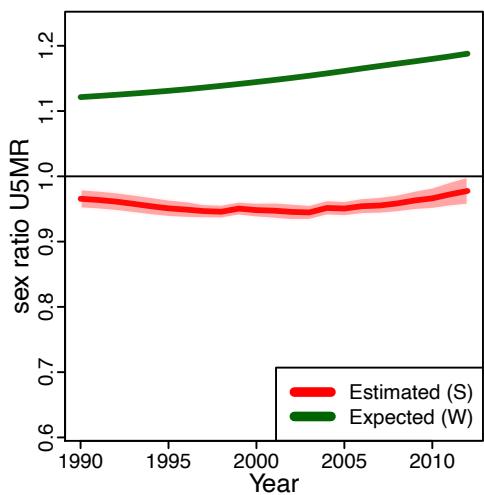
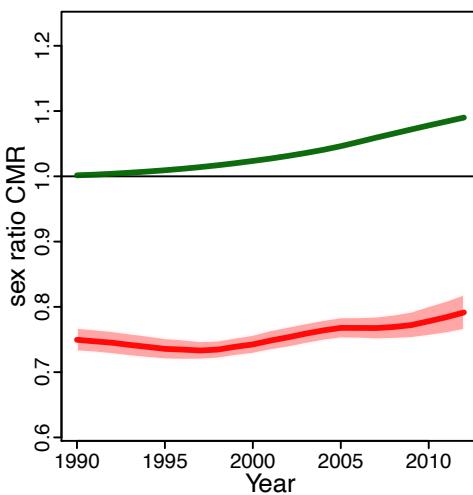
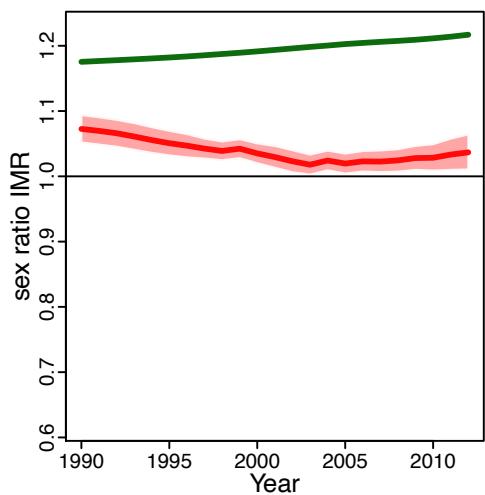
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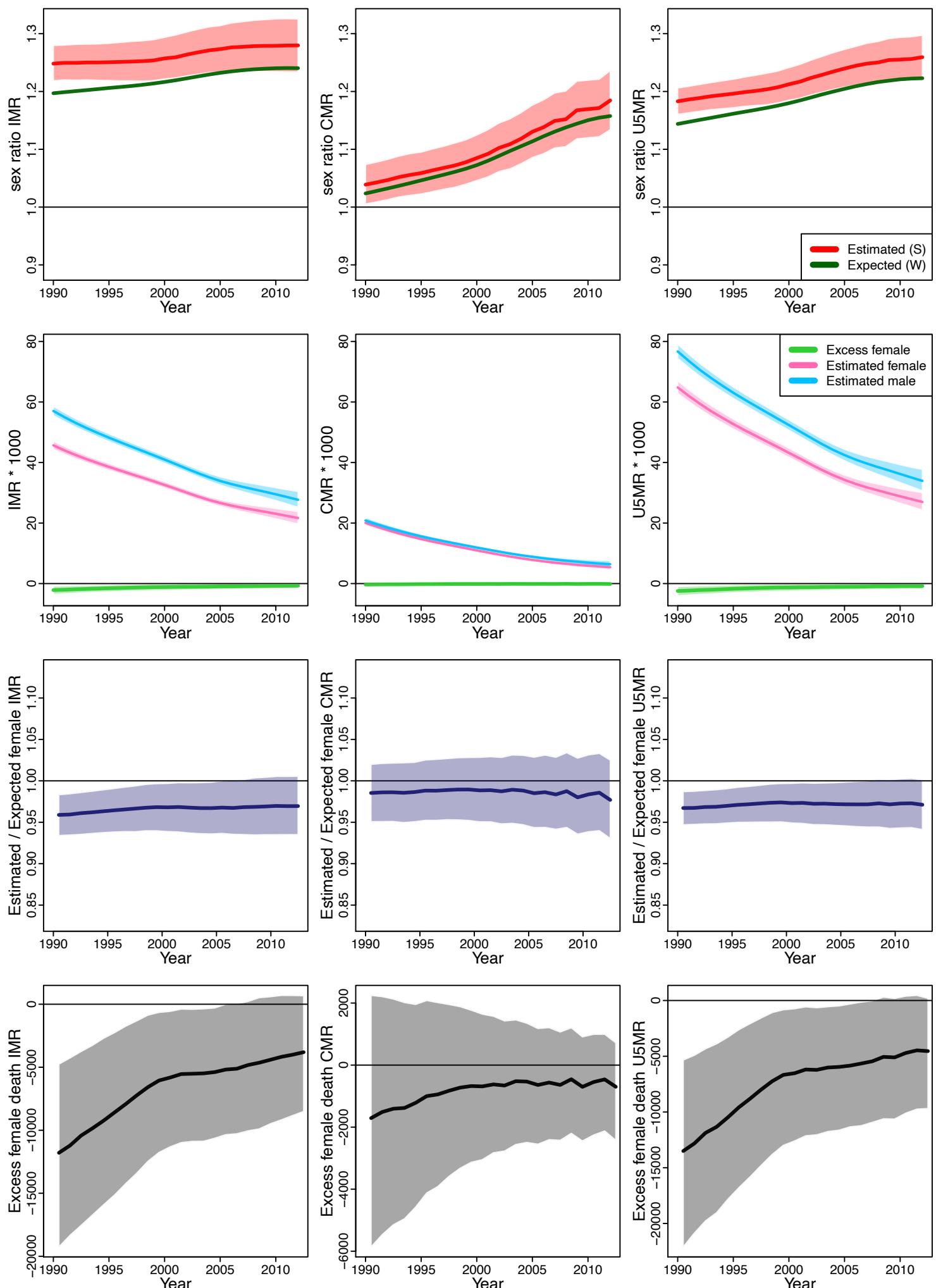
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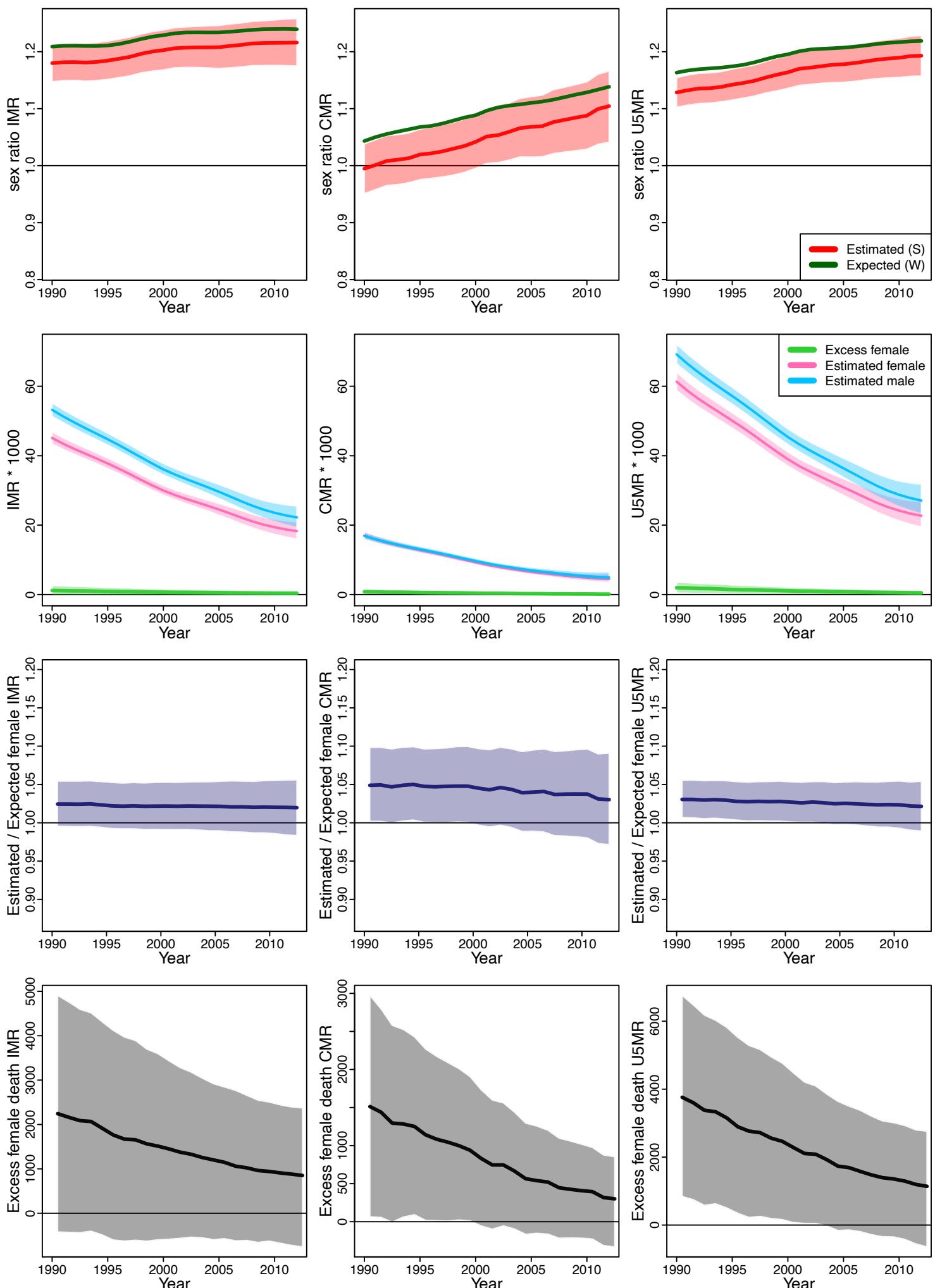
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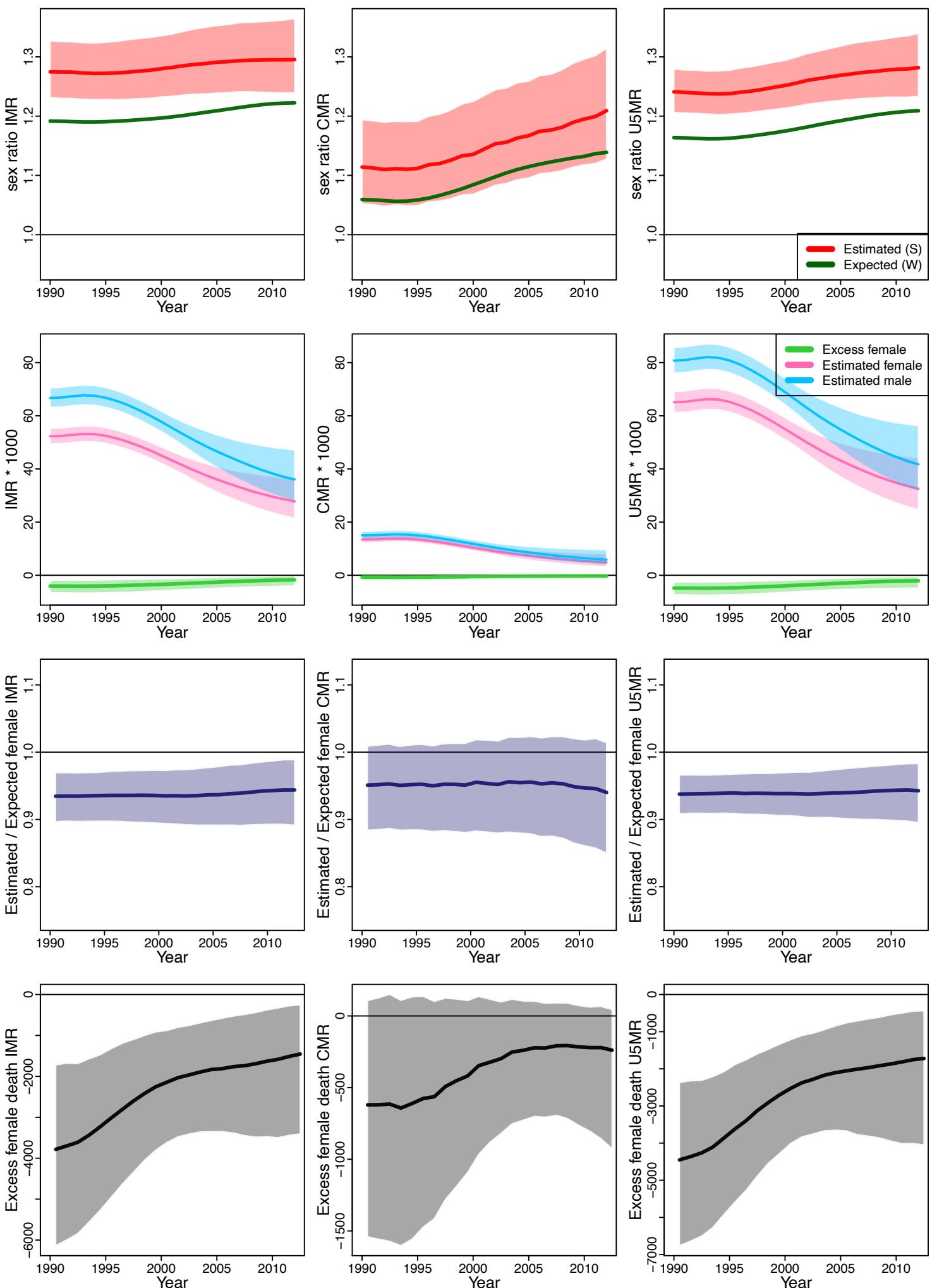
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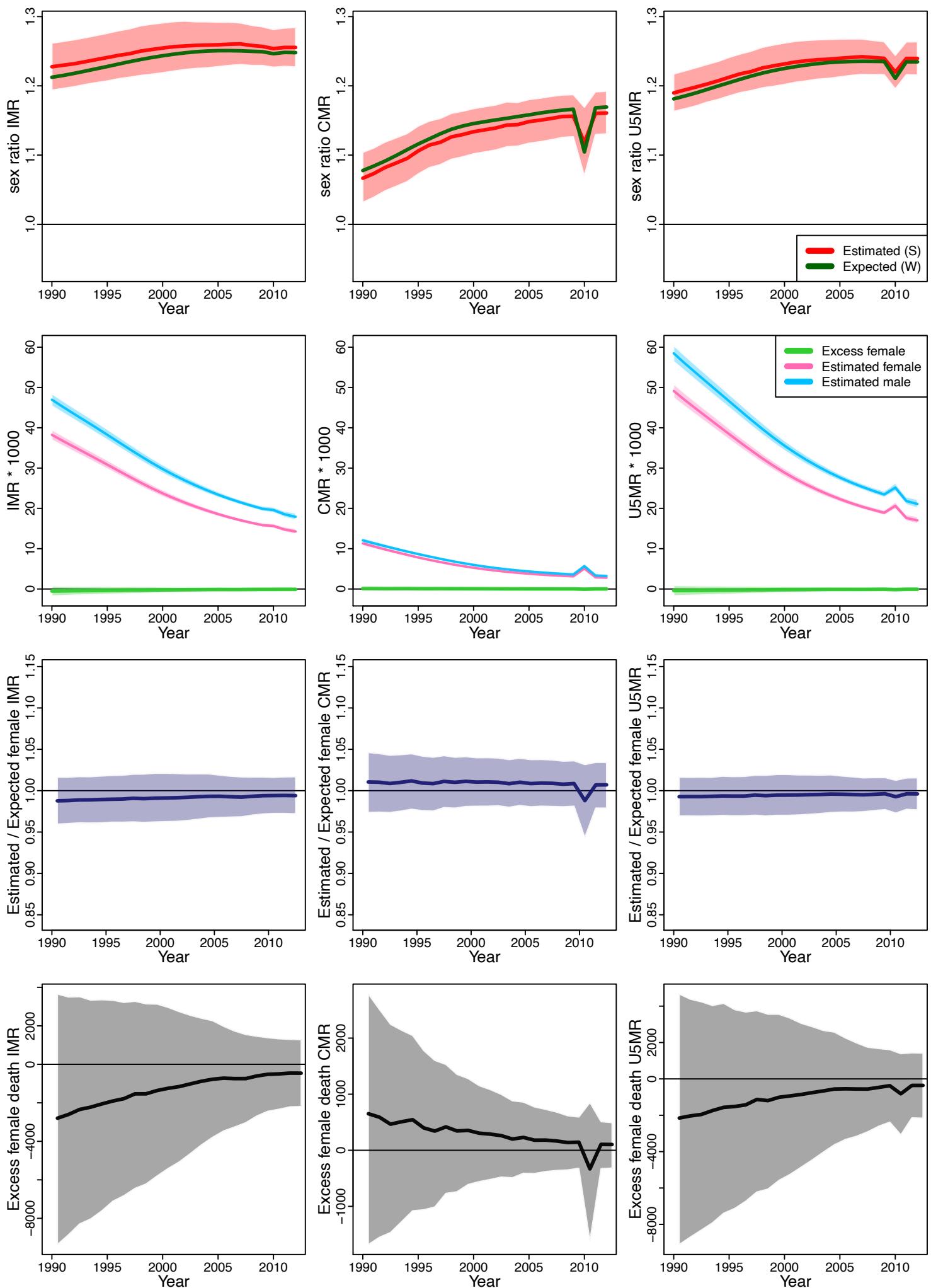
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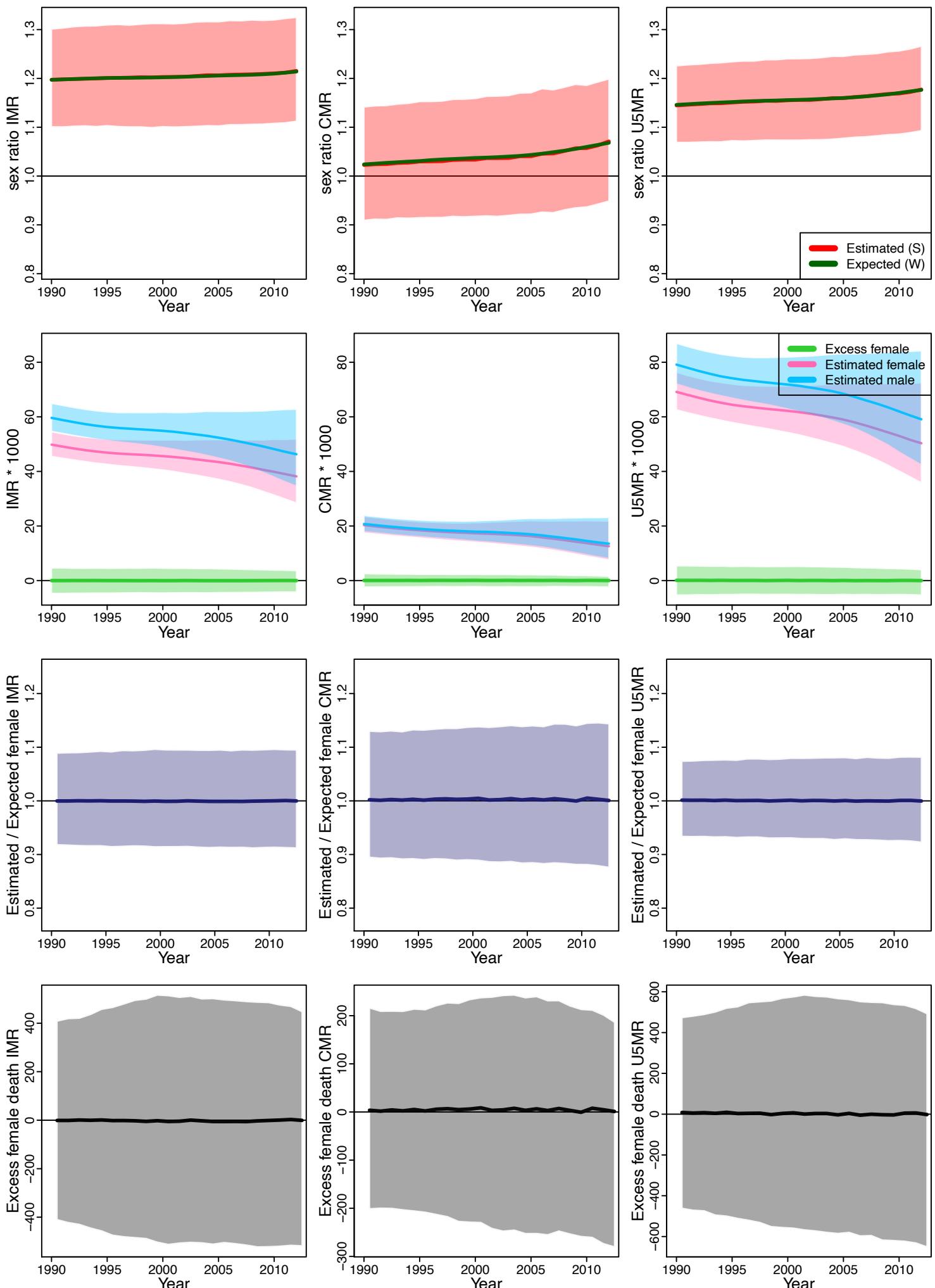
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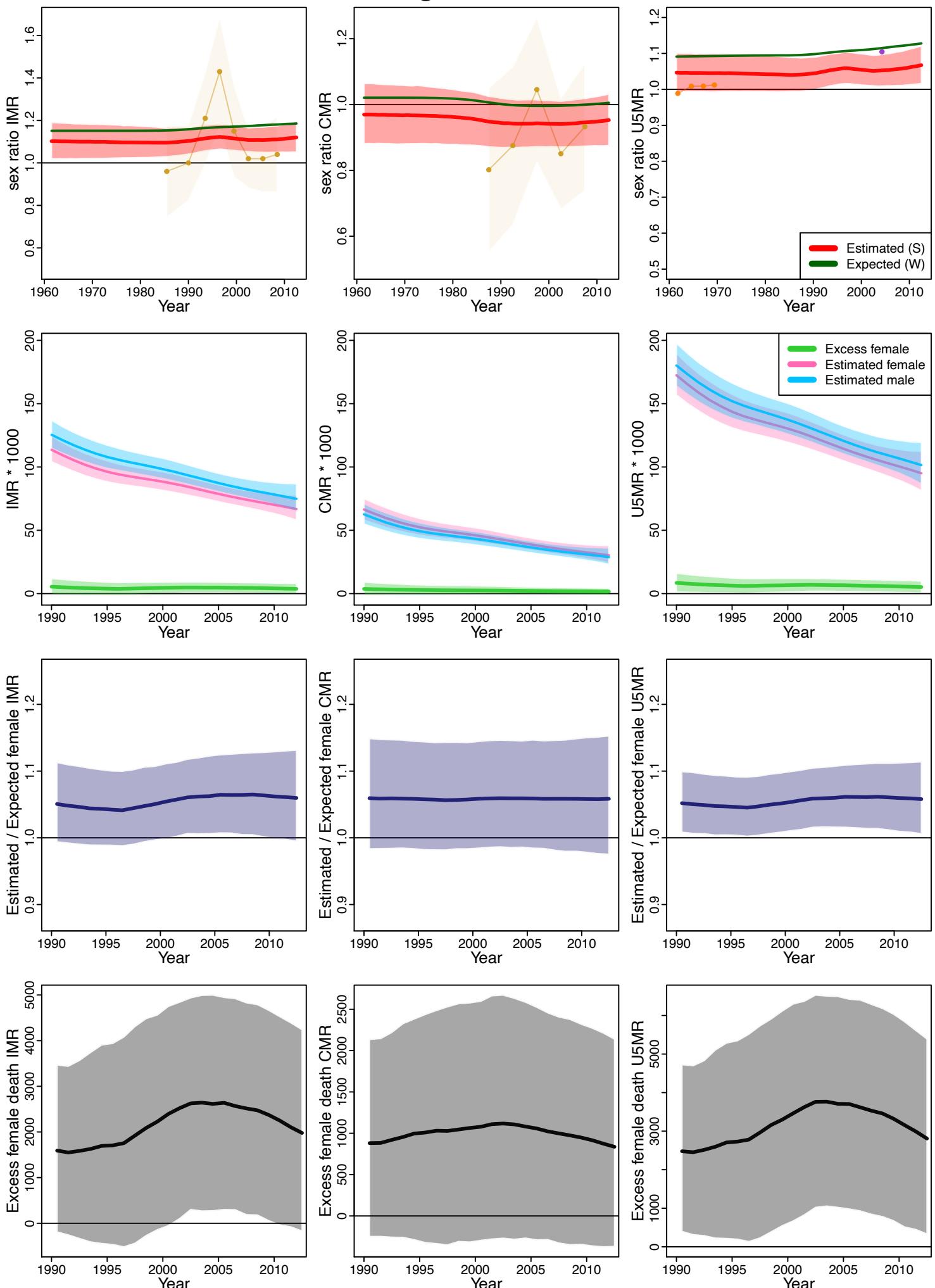
# Latin America and the Caribbean



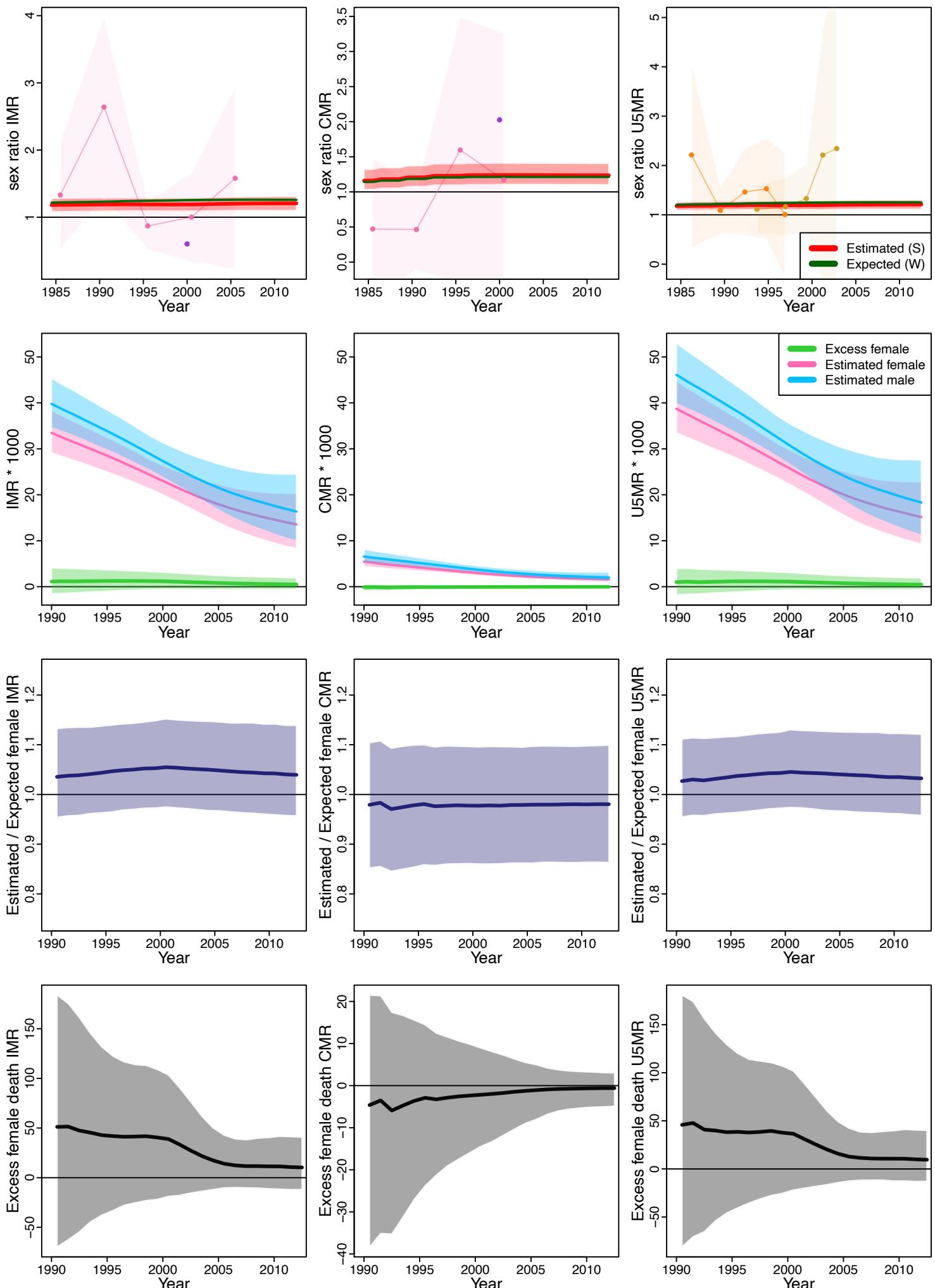
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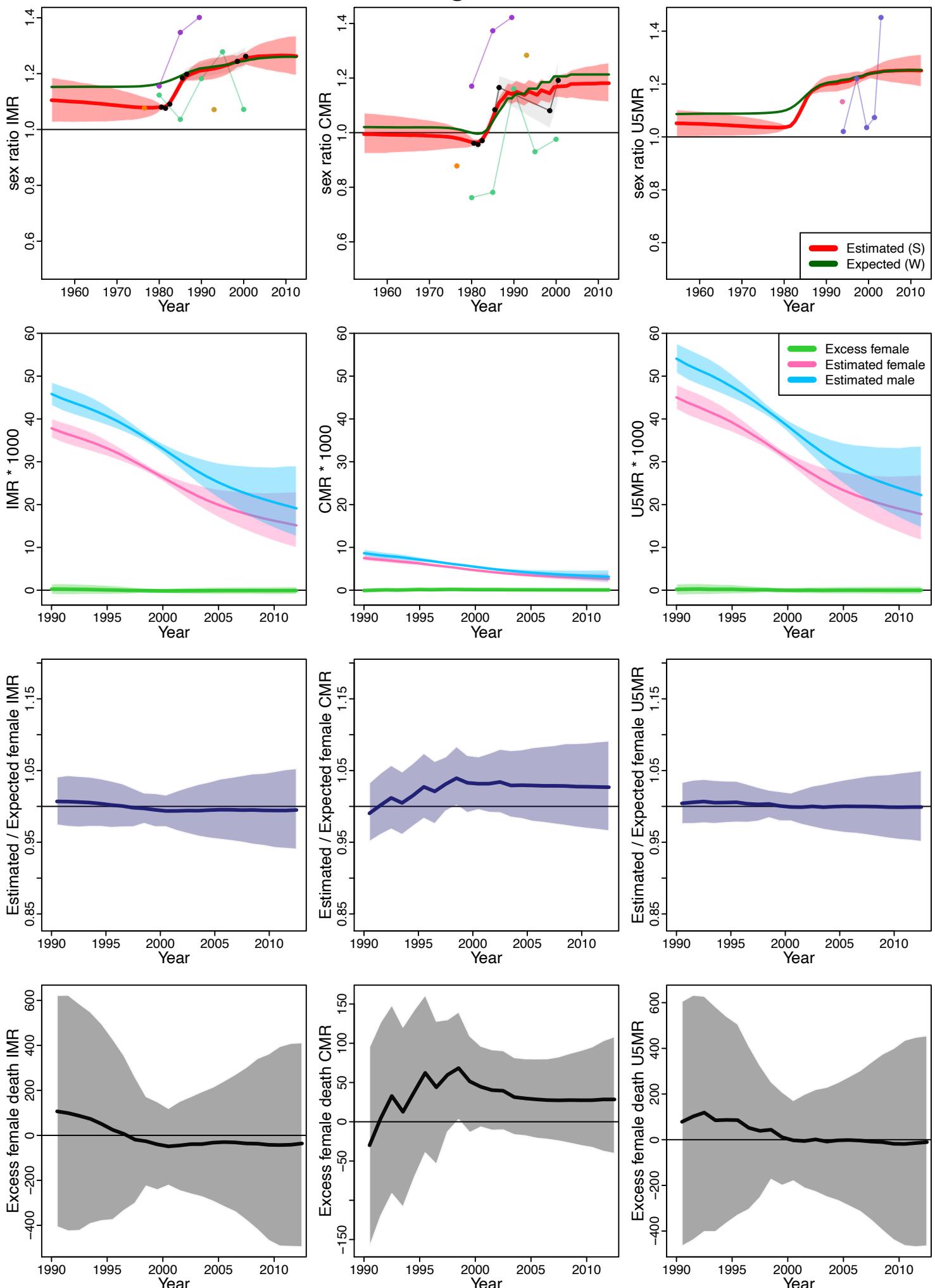
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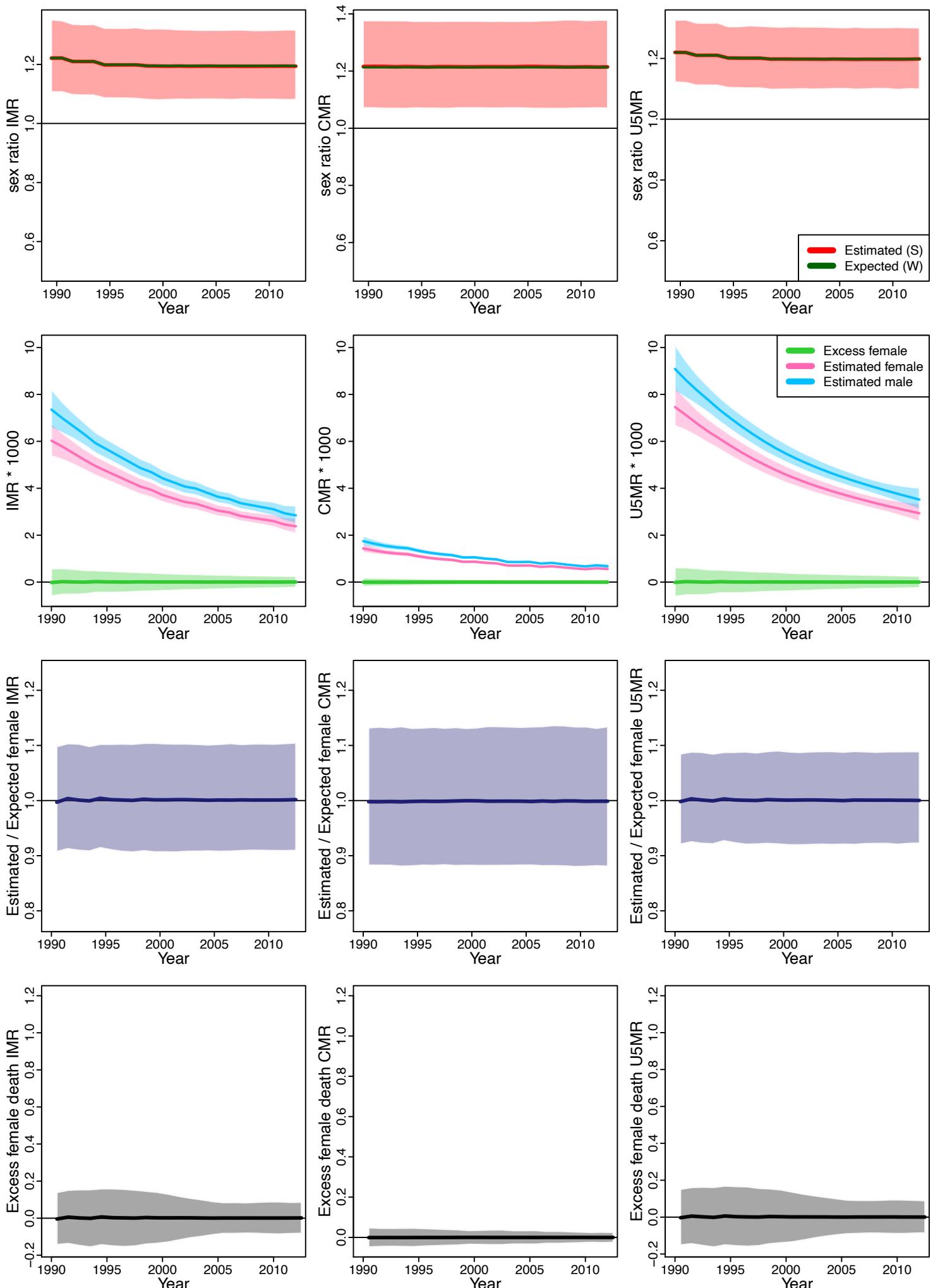
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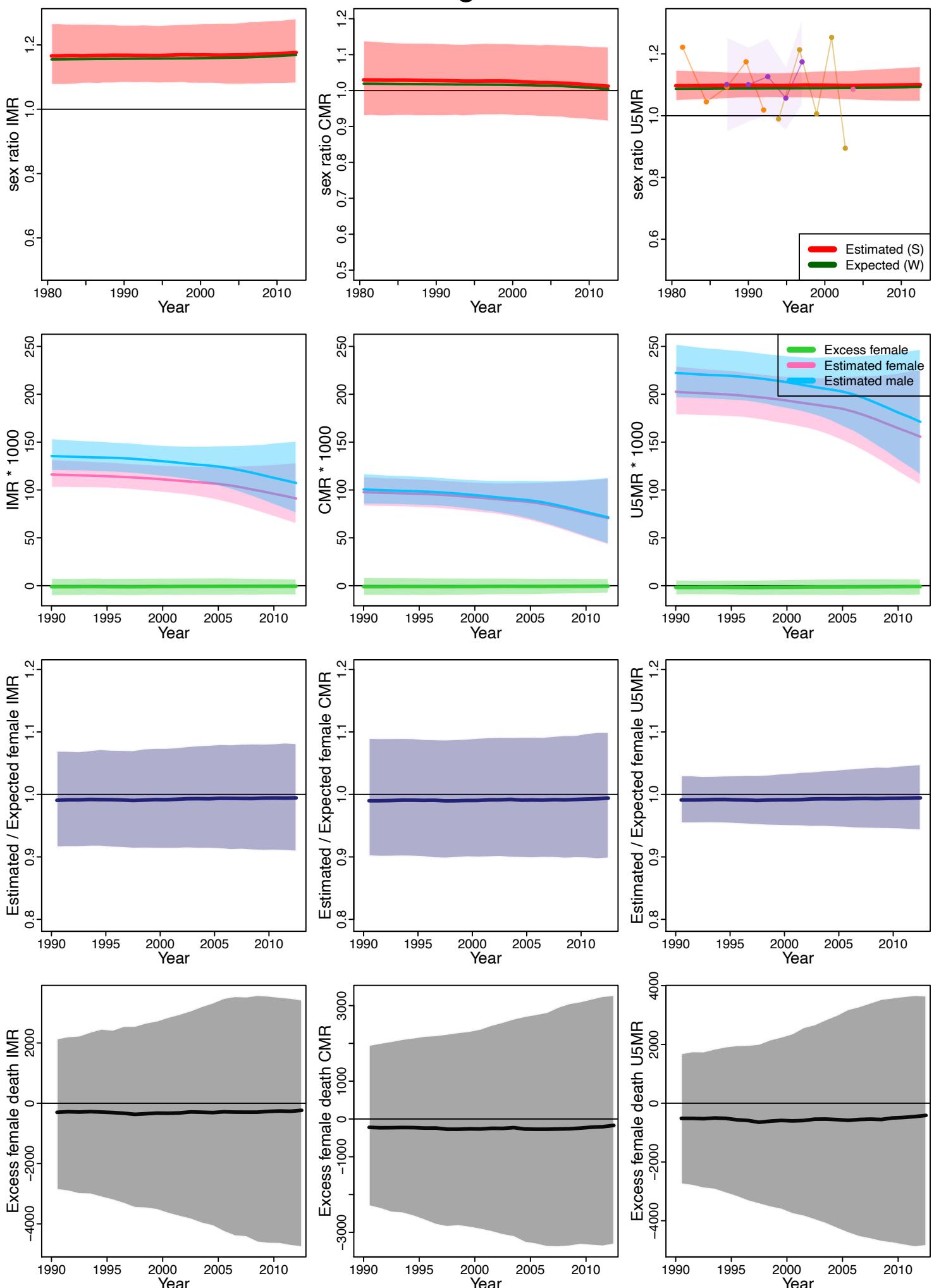
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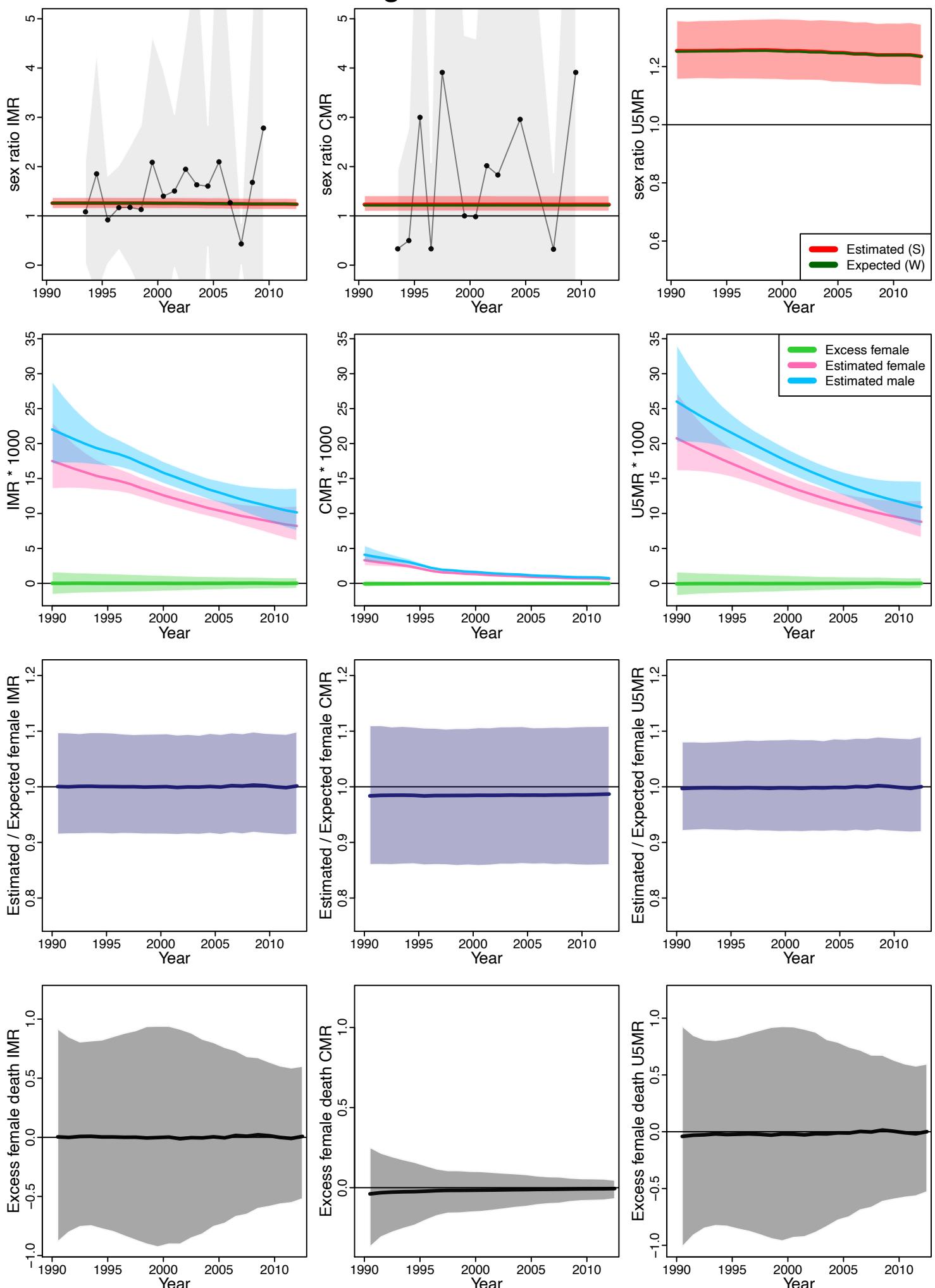
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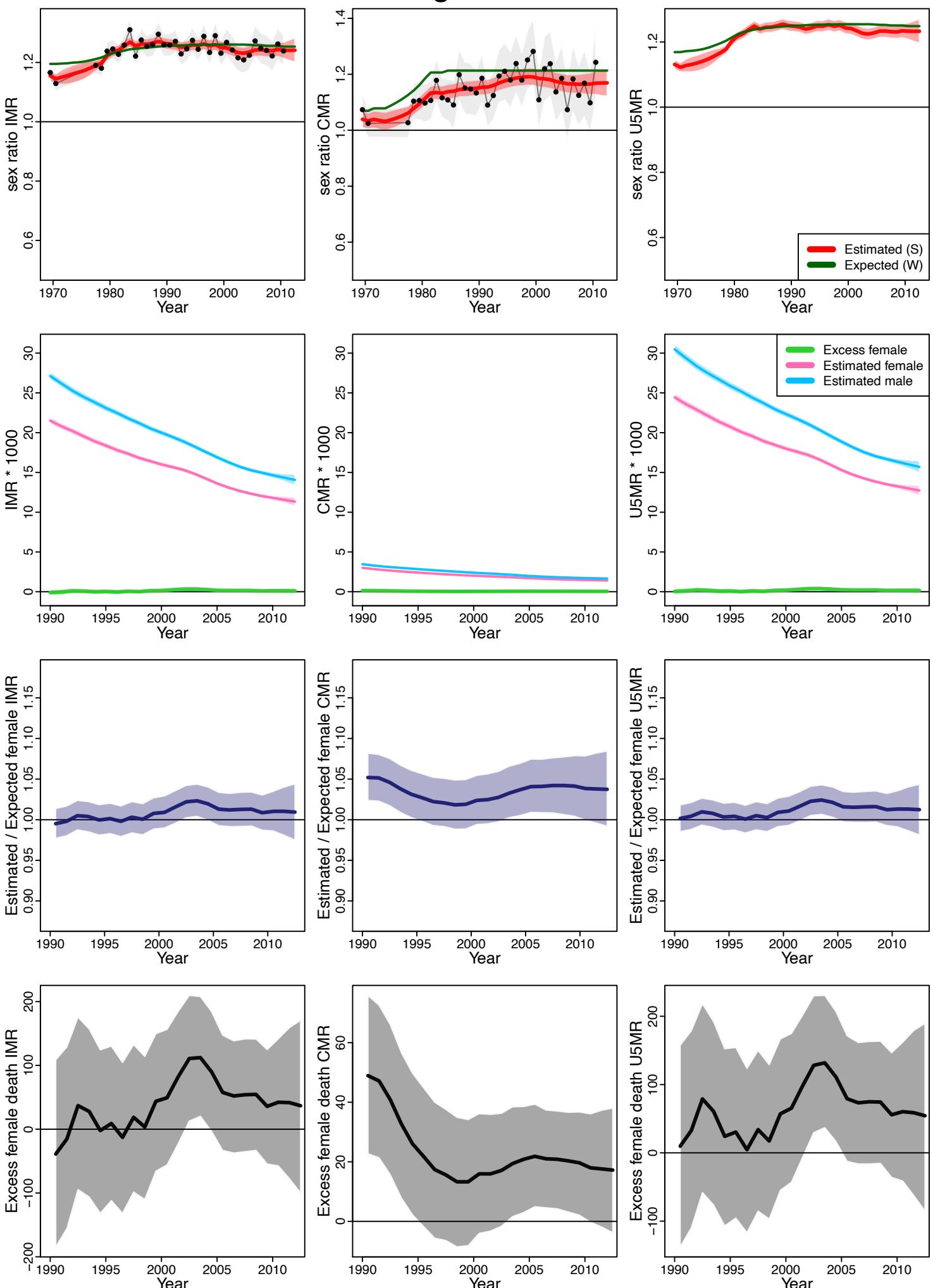
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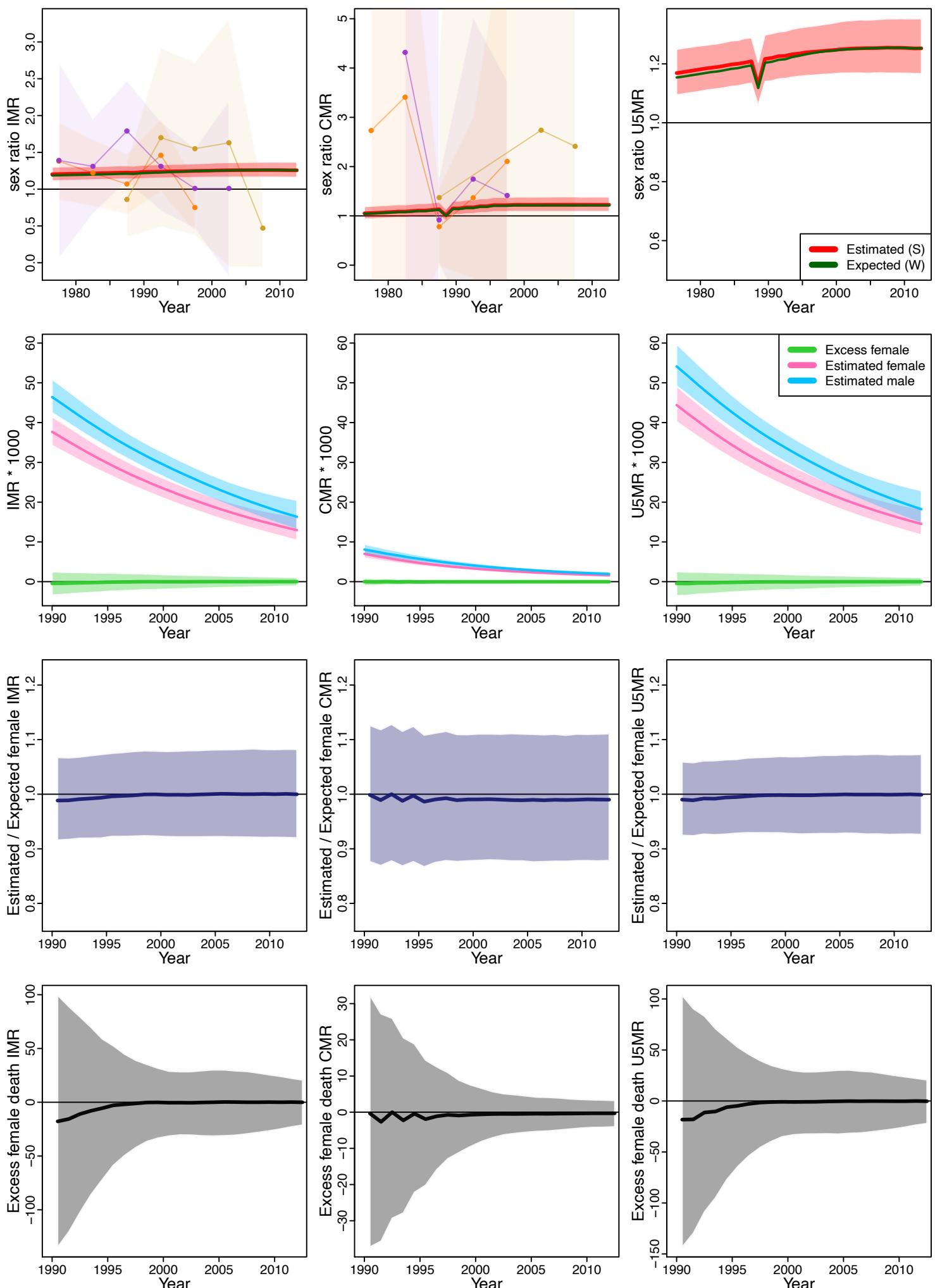
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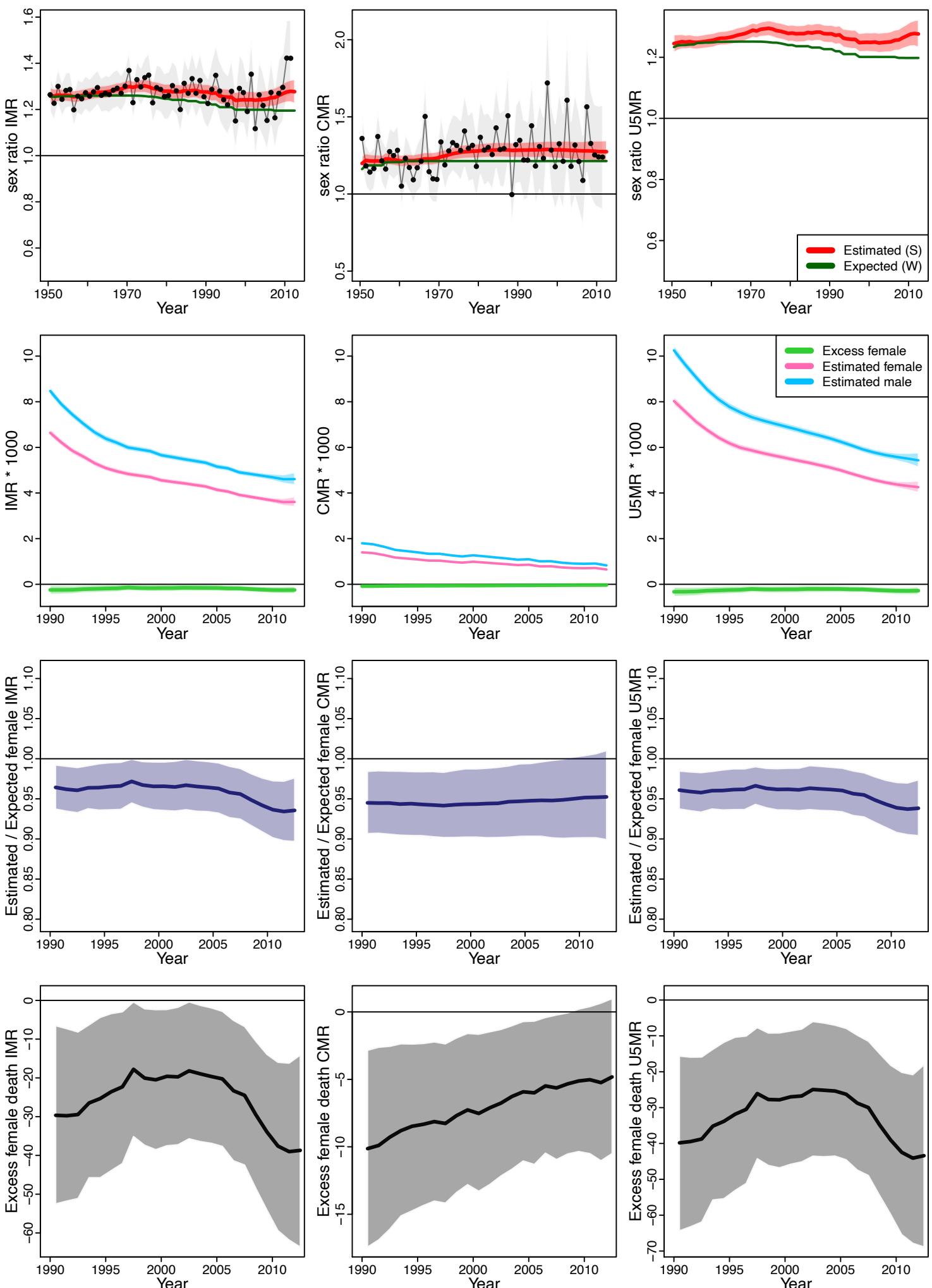
# Argentina



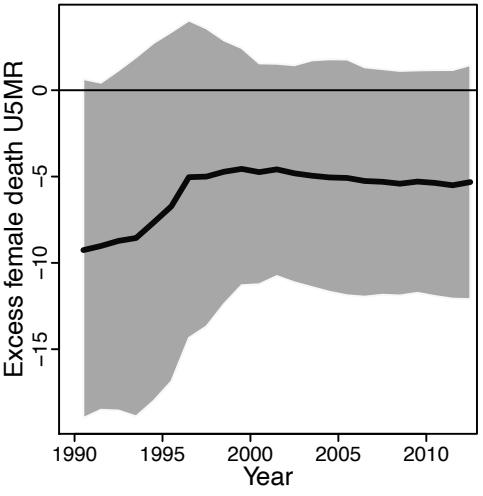
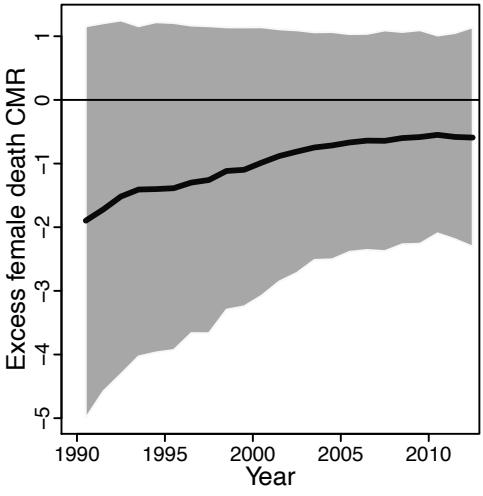
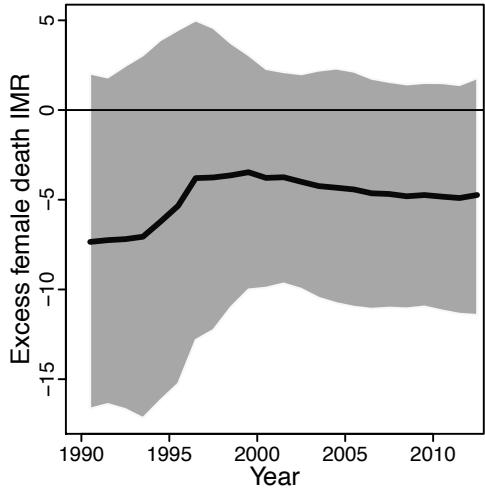
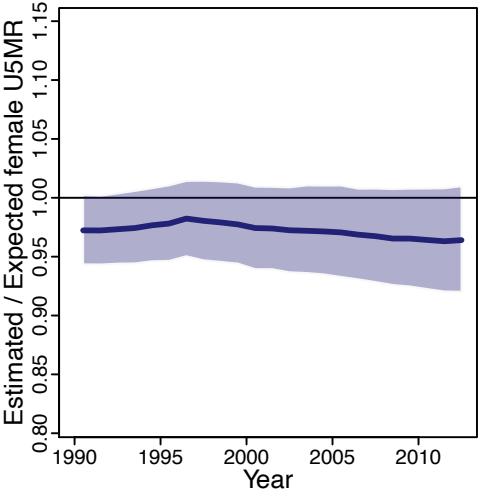
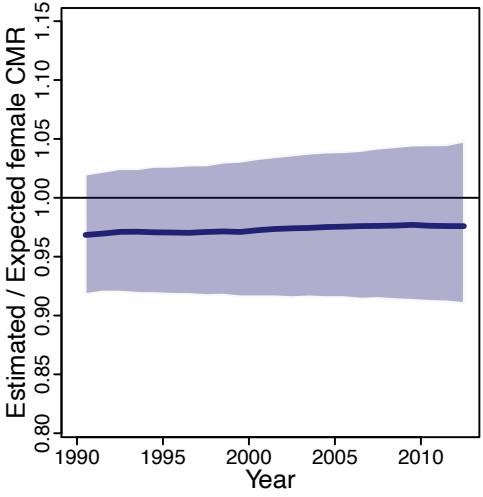
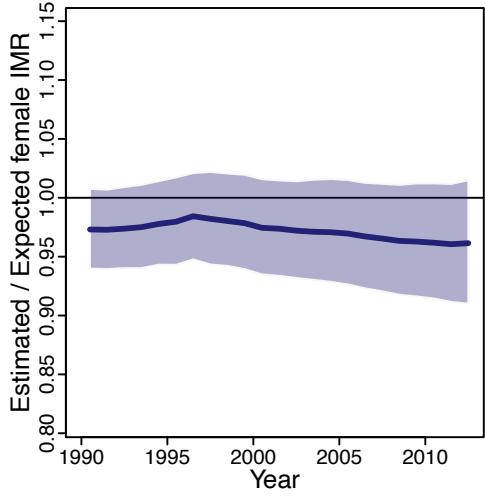
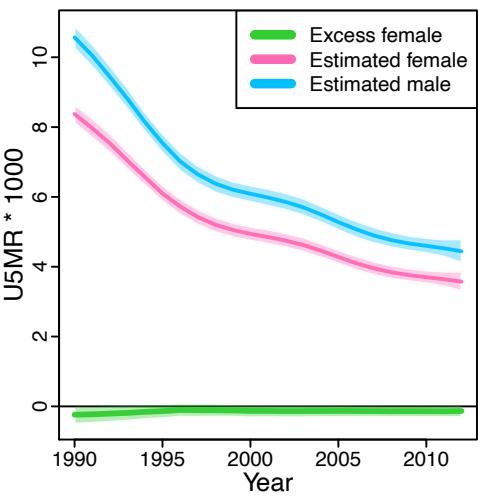
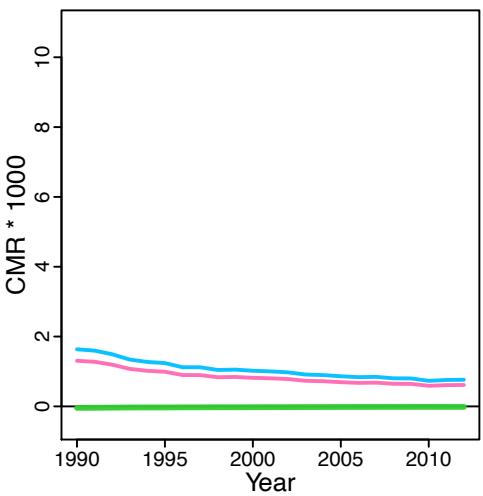
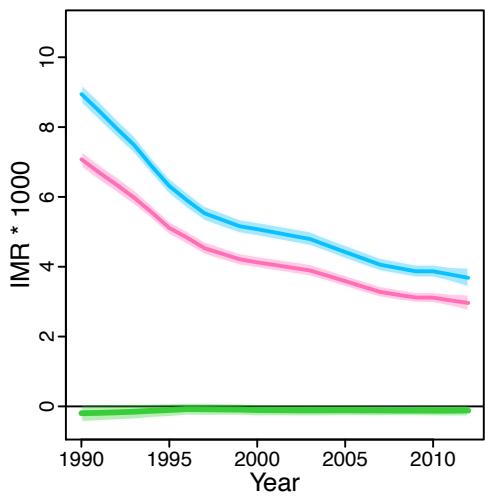
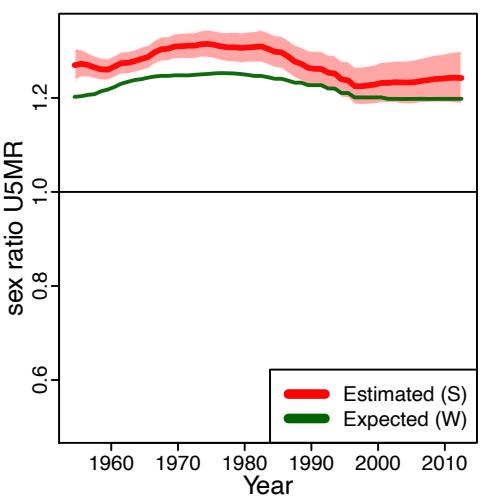
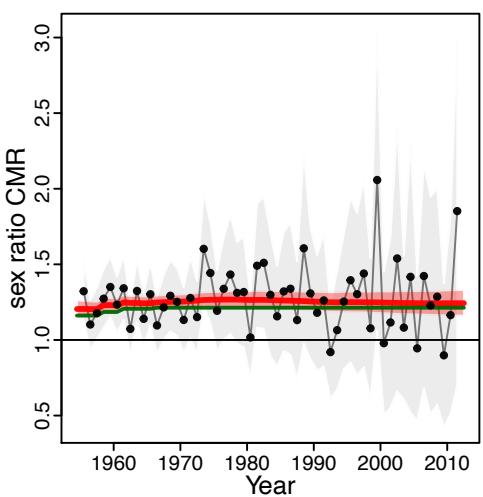
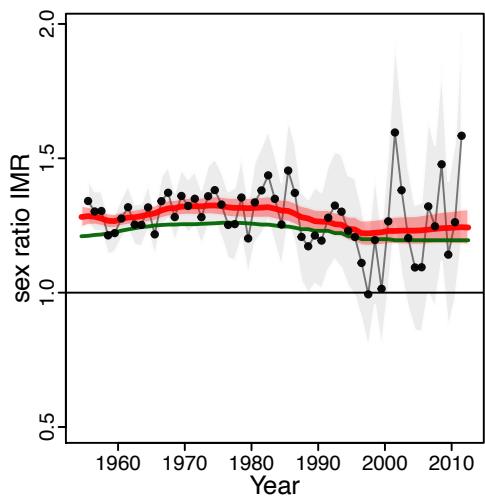
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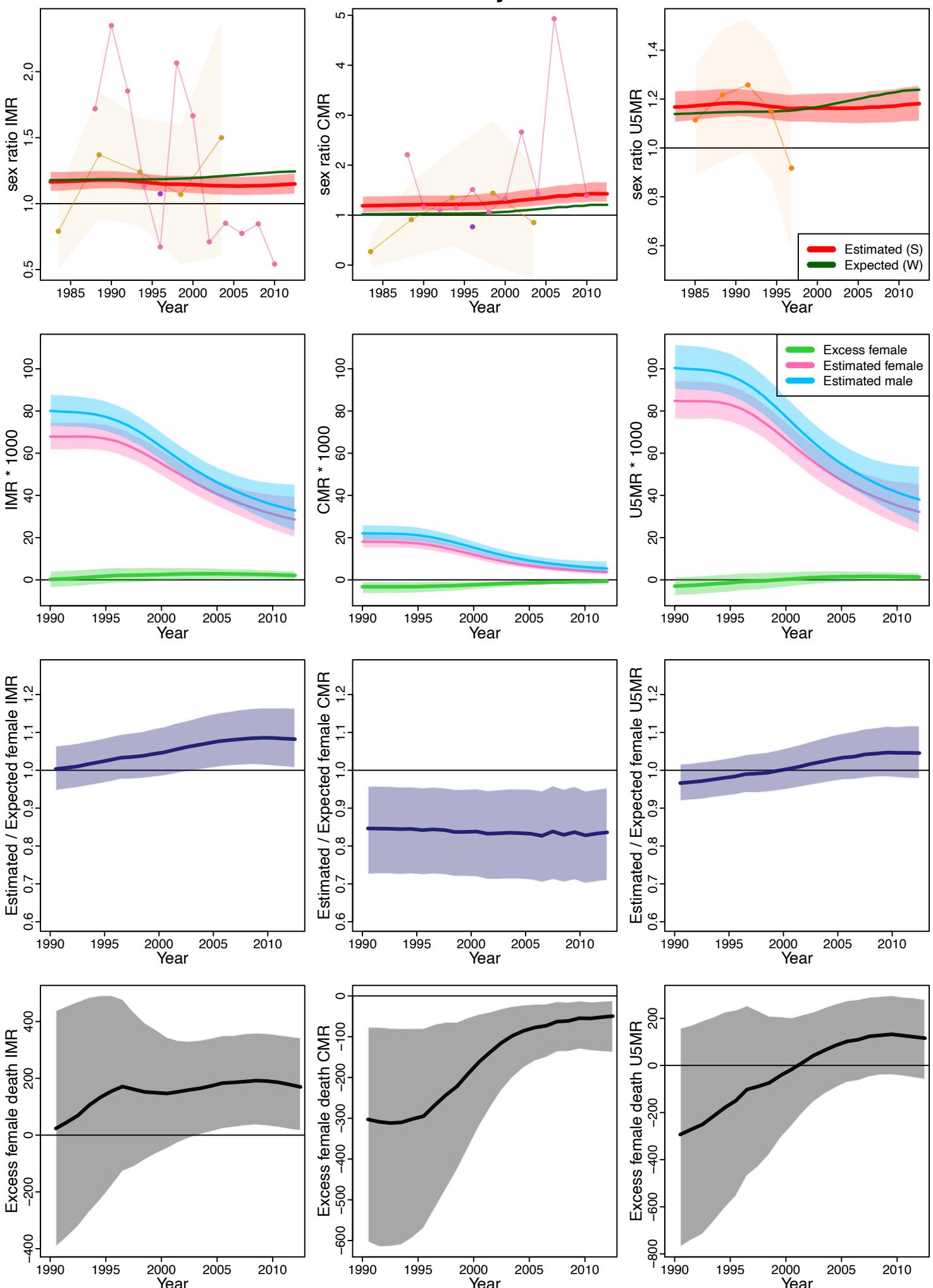
# Australia



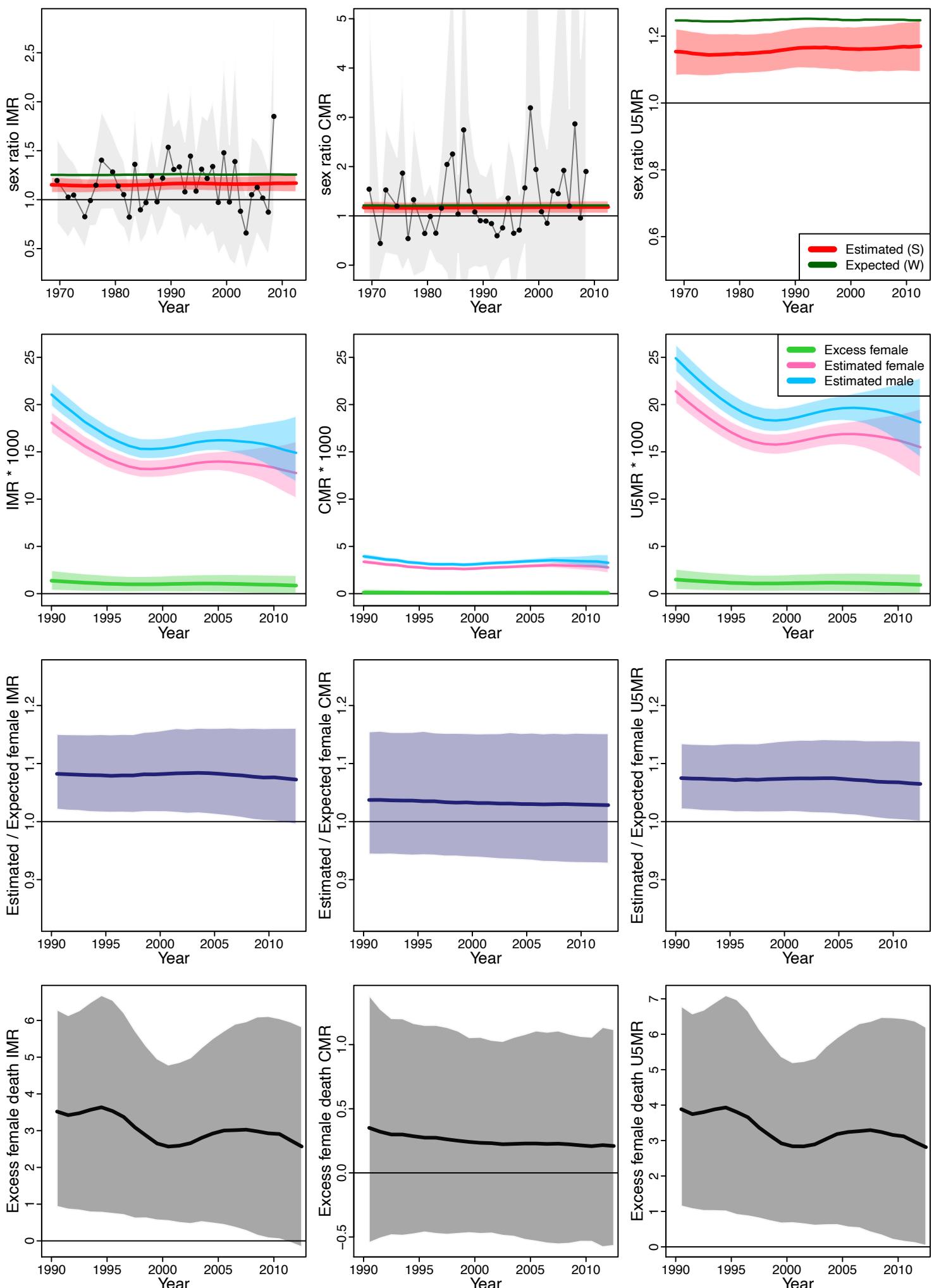
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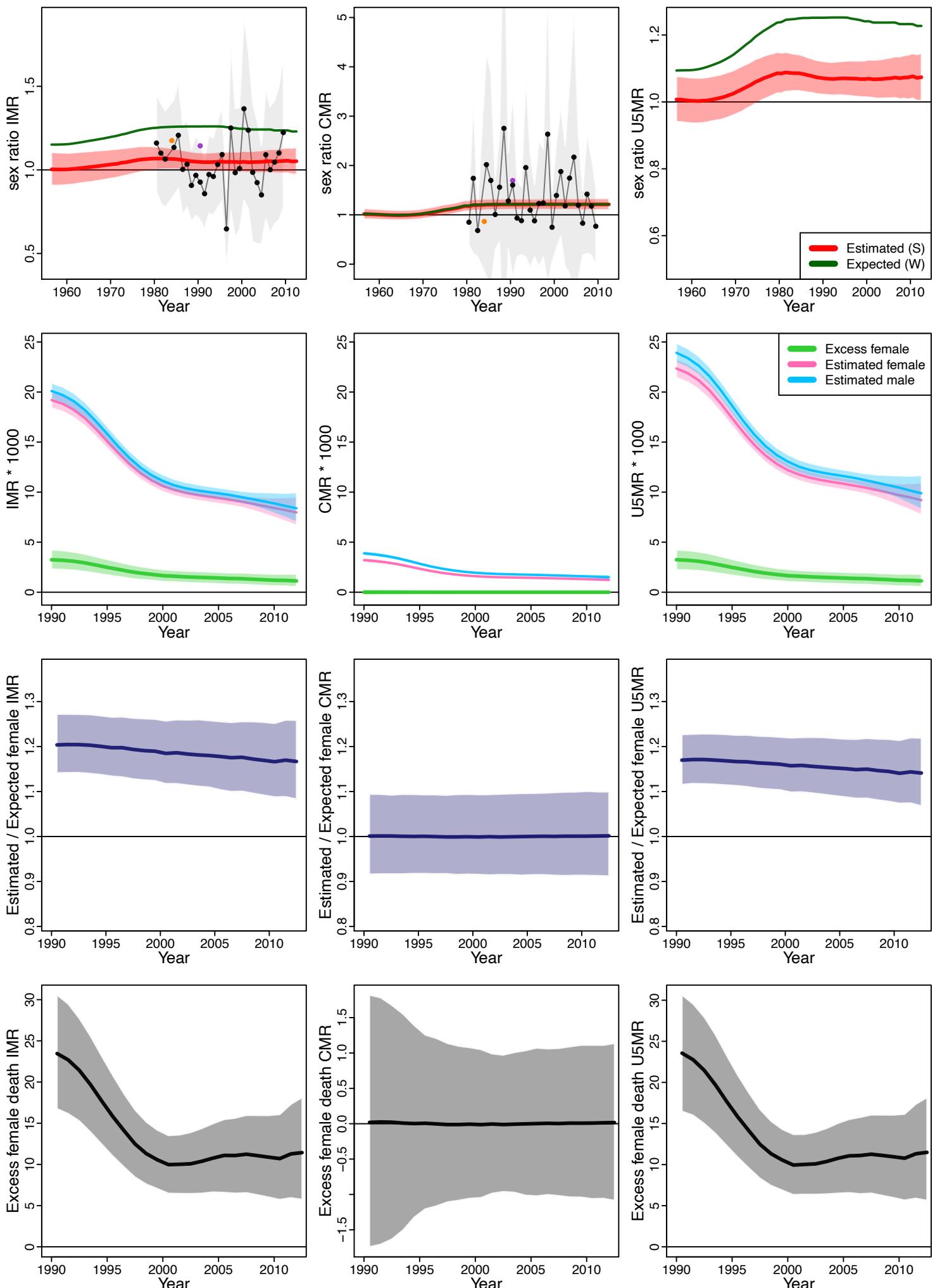
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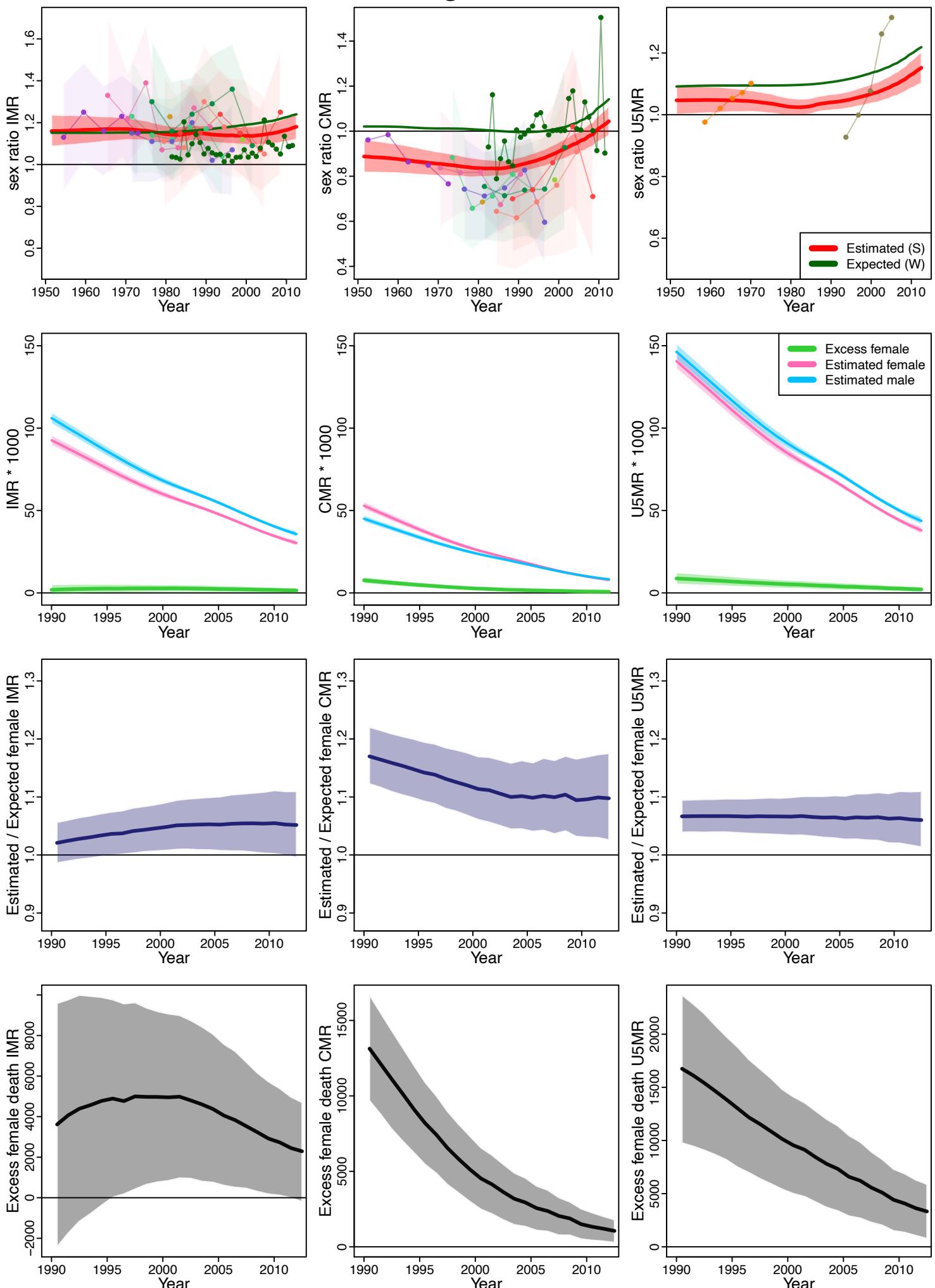
# Bahamas



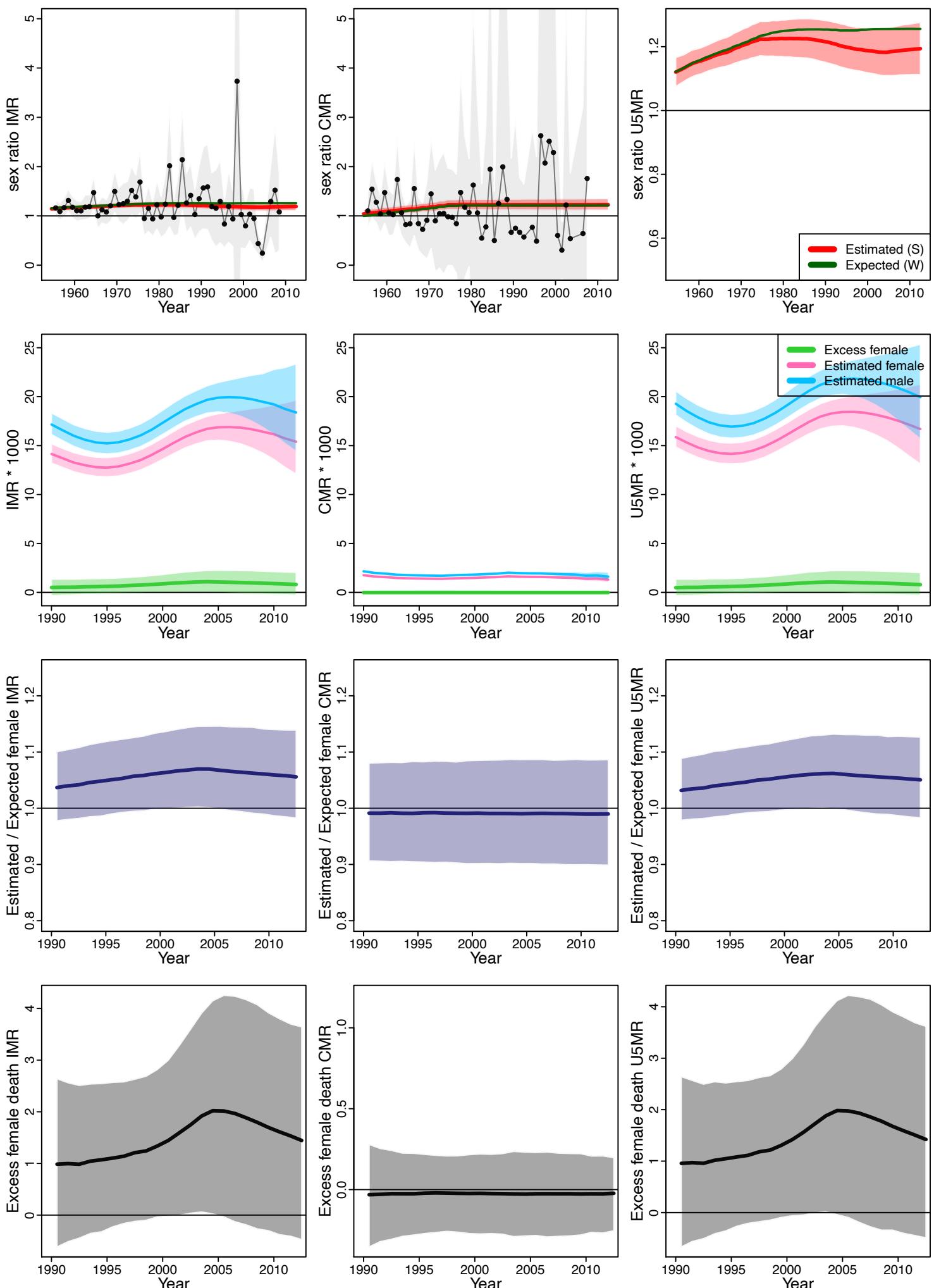
# Bahrain



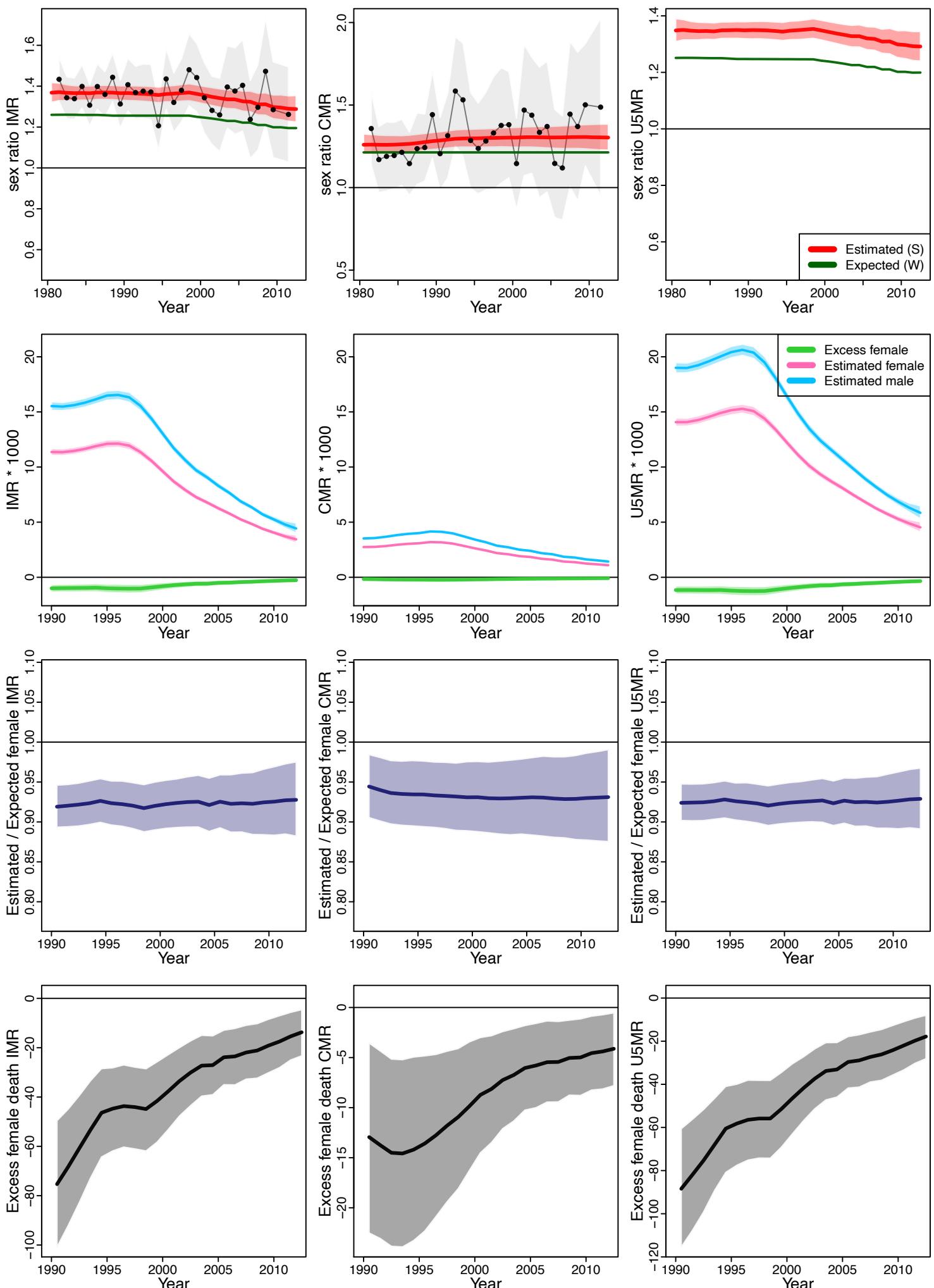
# Bangladesh



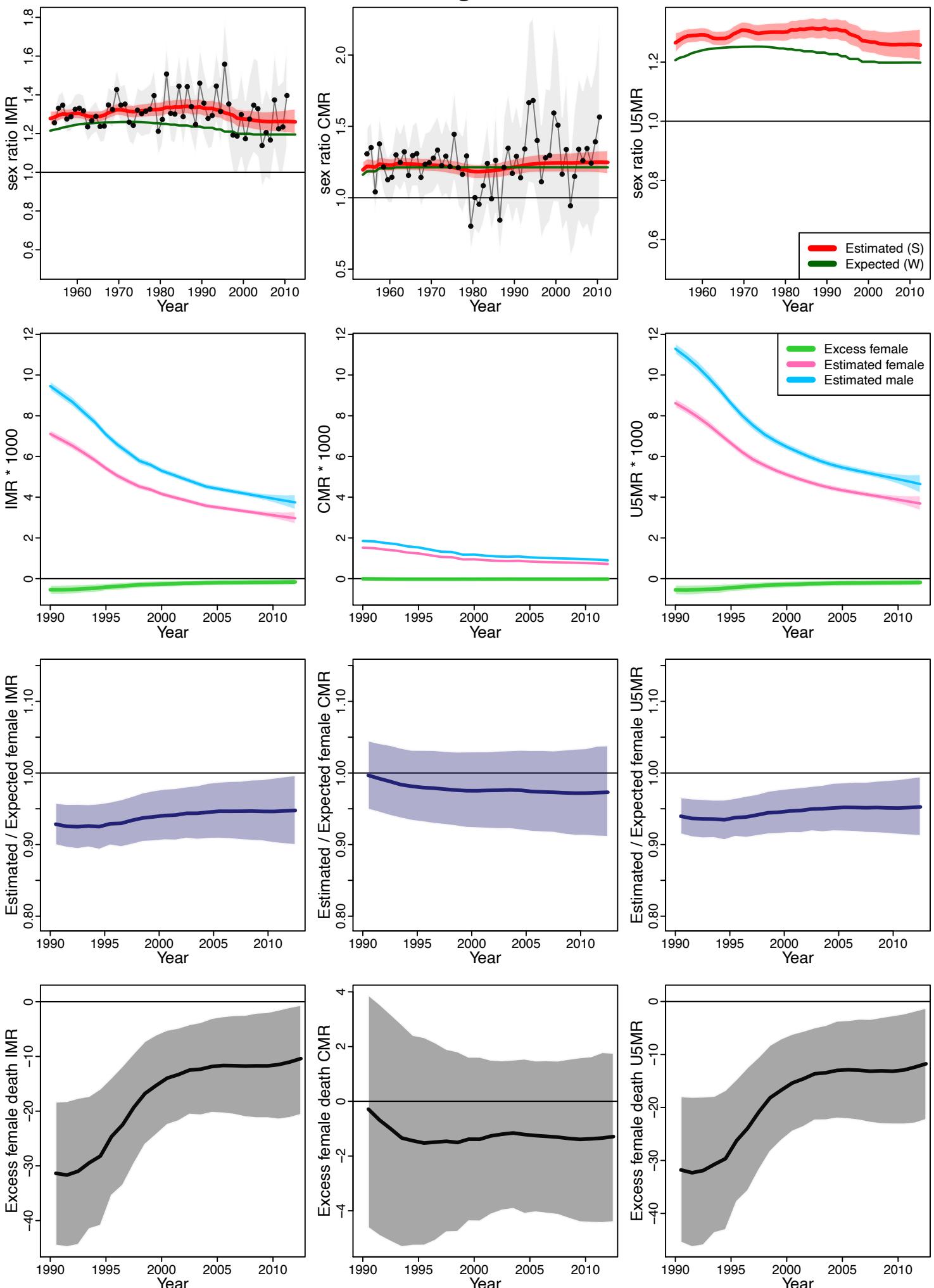
# Barbados



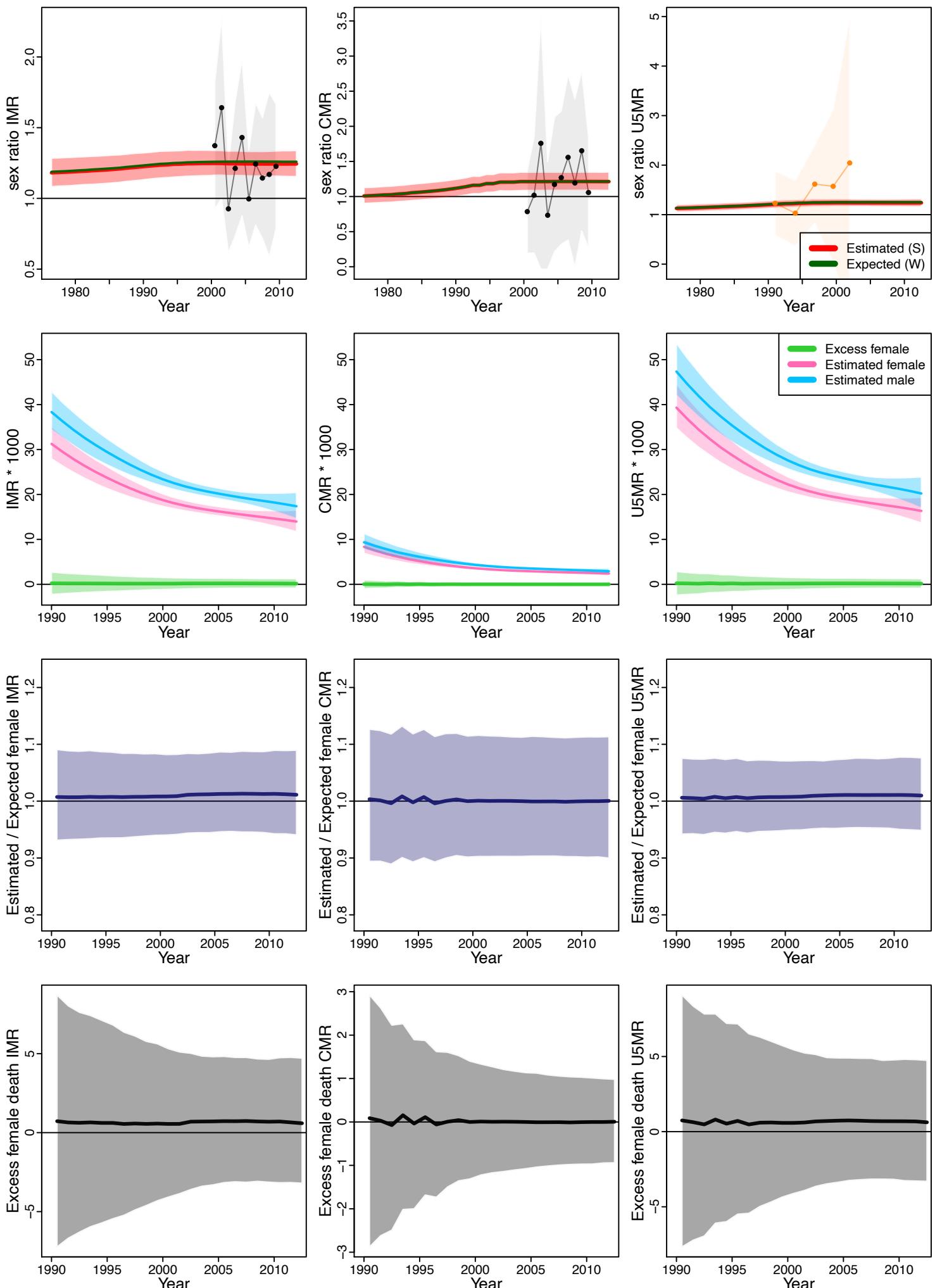
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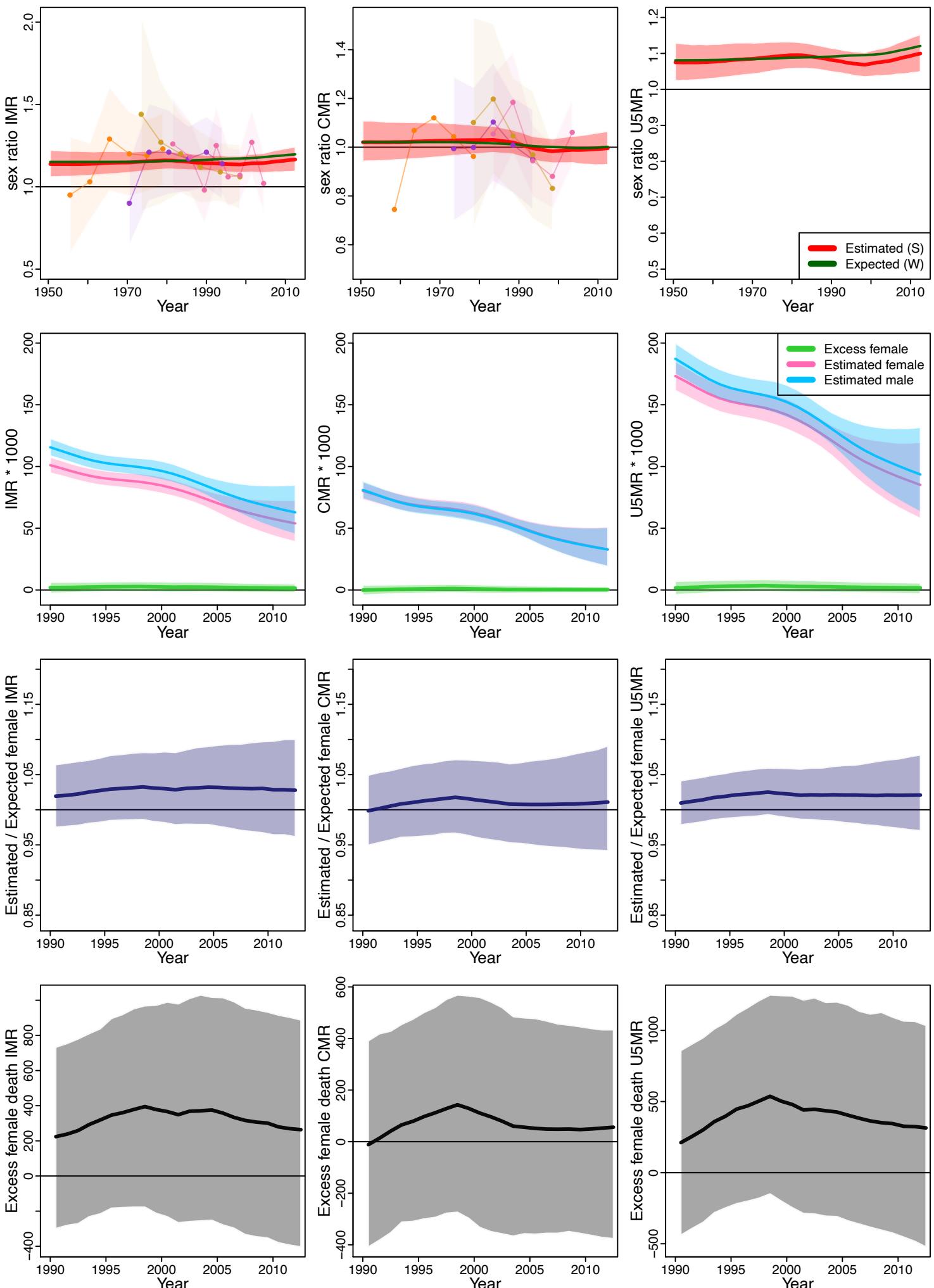
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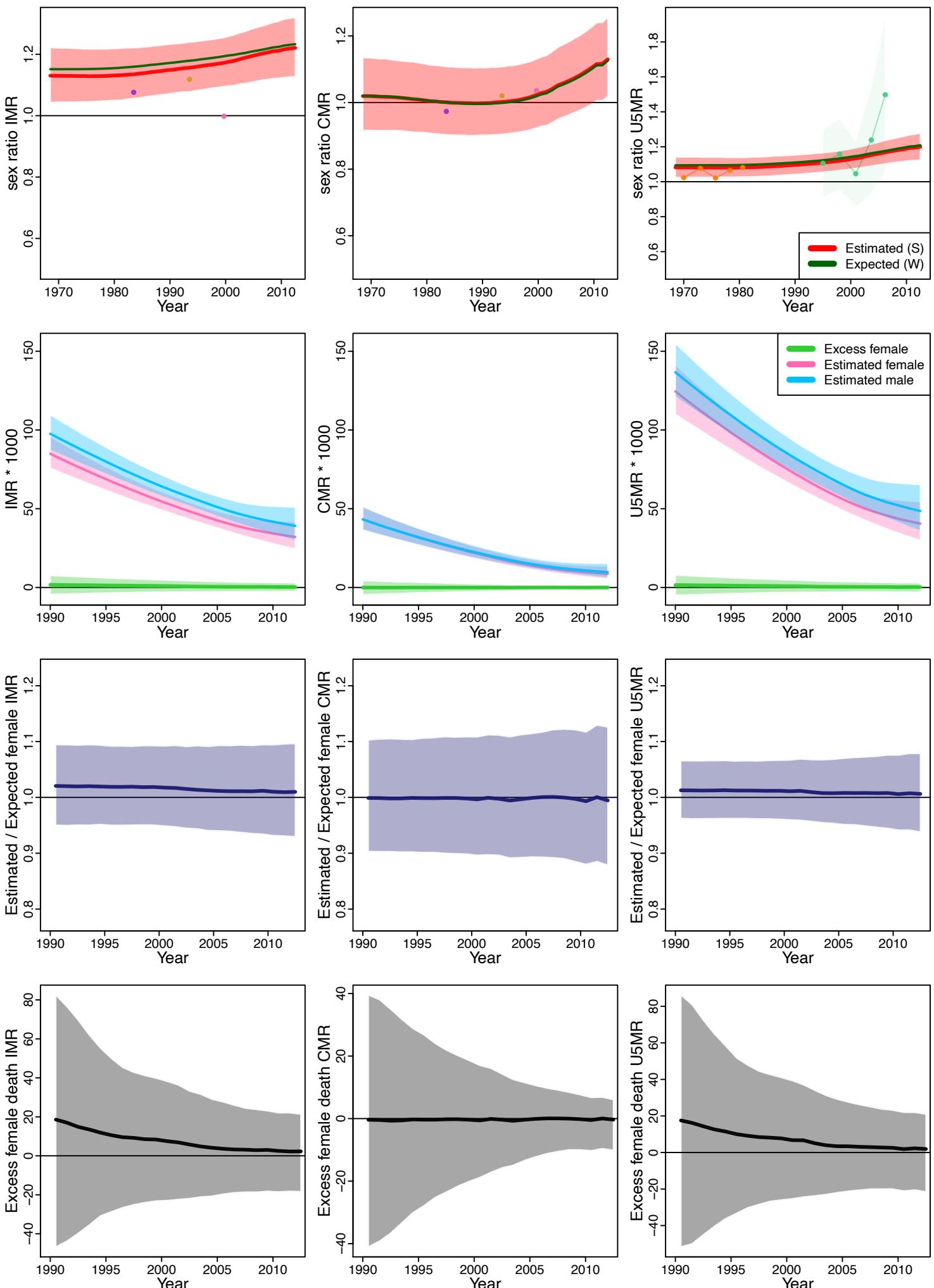
# Belize



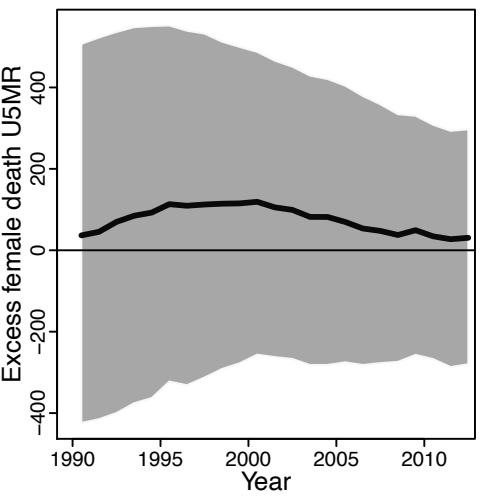
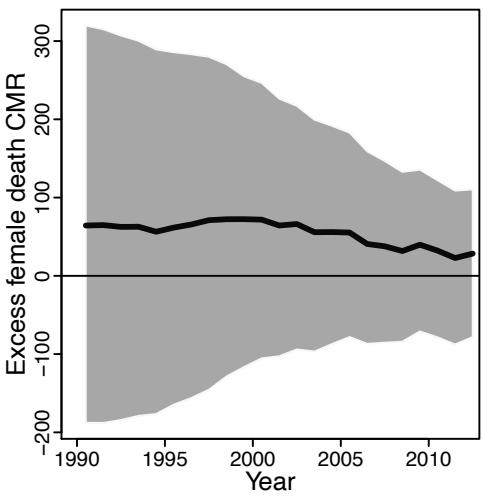
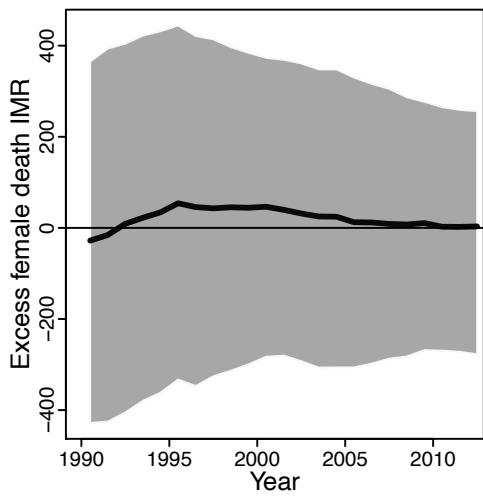
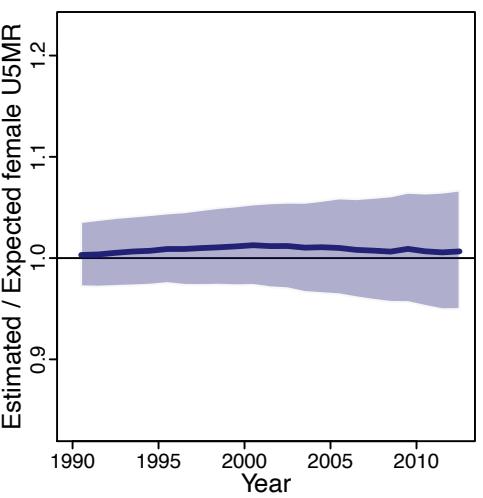
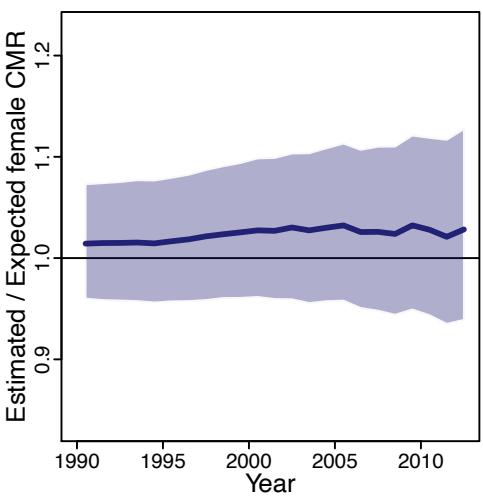
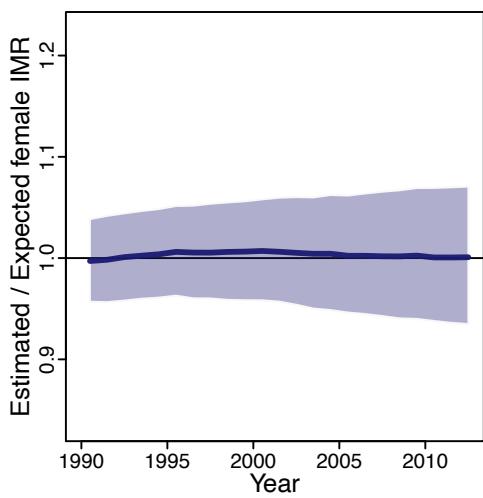
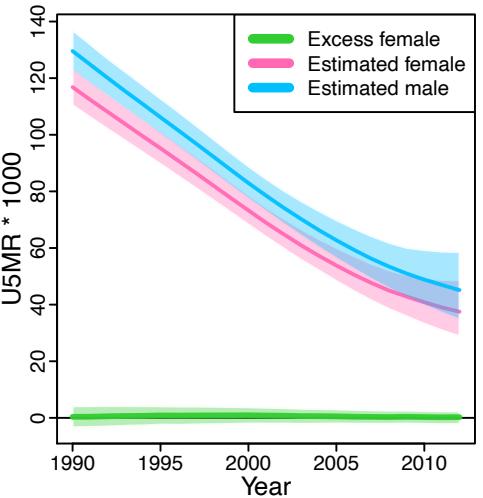
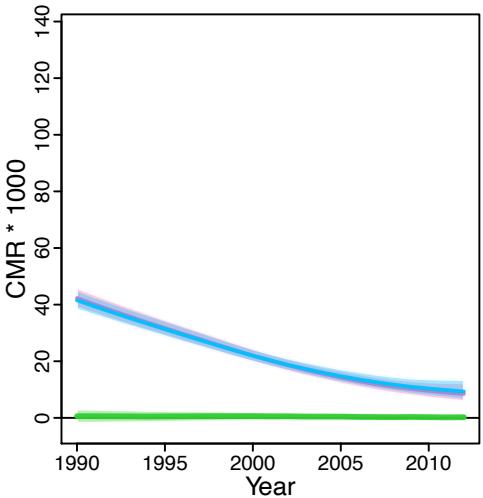
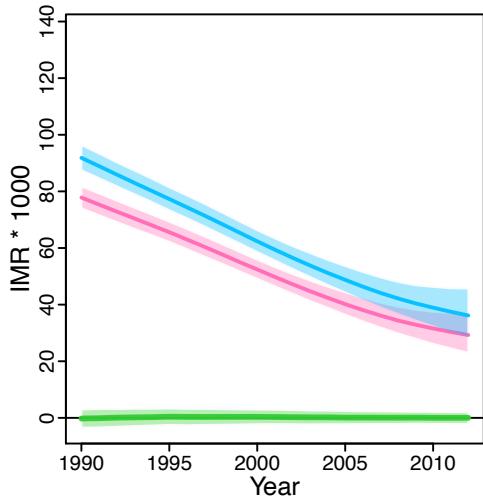
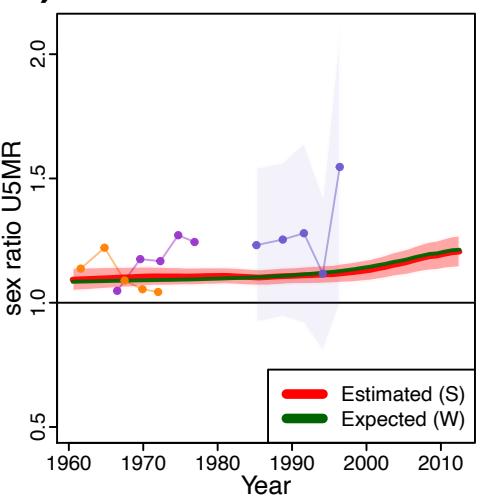
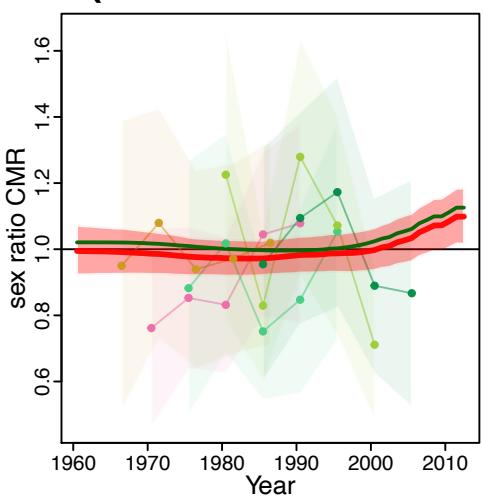
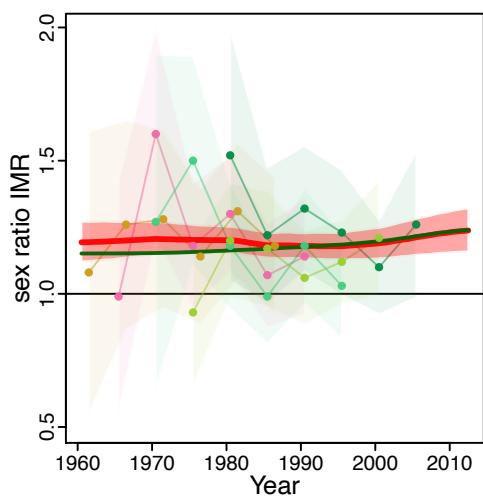
# Benin



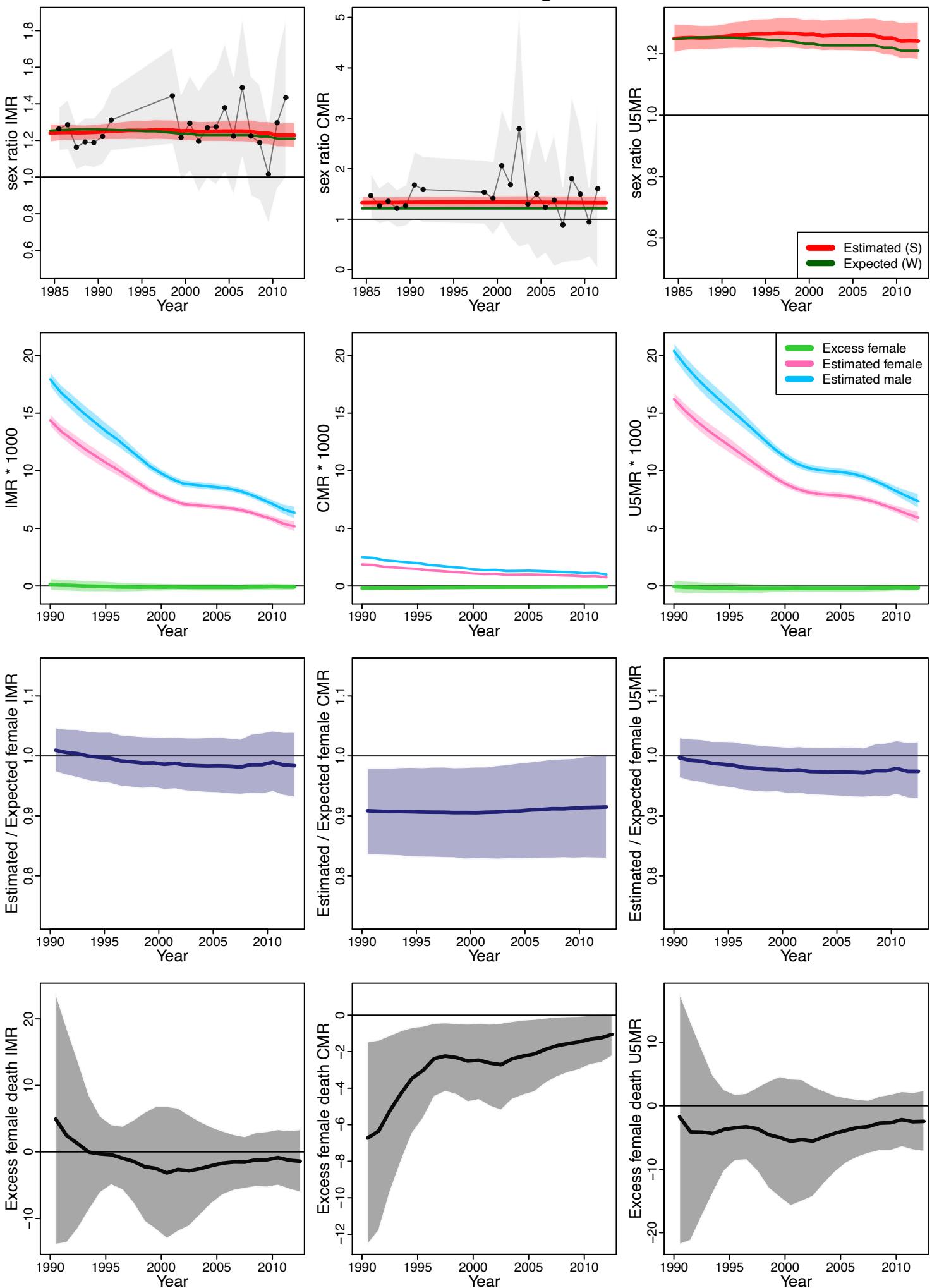
# Bhutan



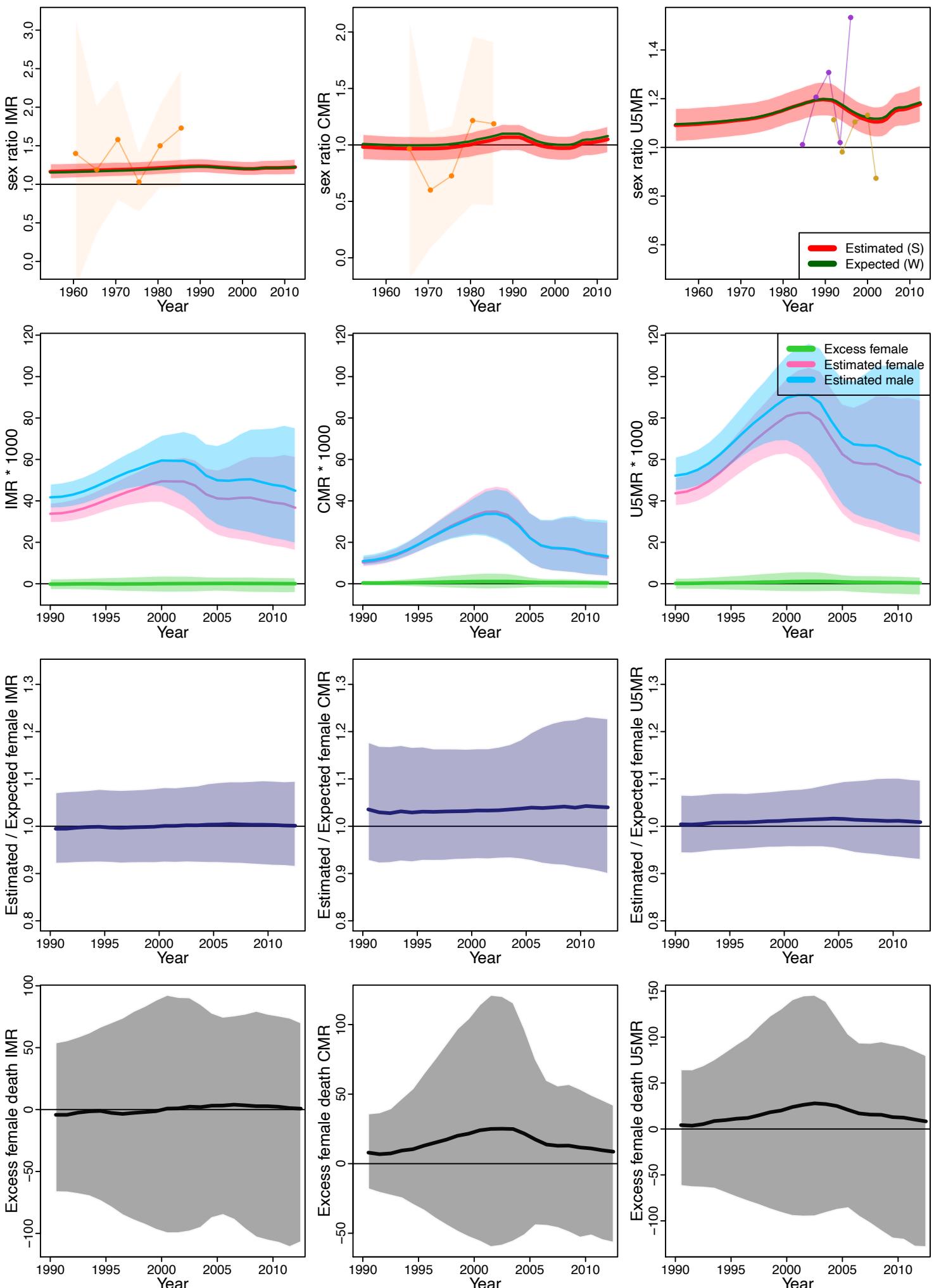
## **Bolivia (Plurinational State of)**



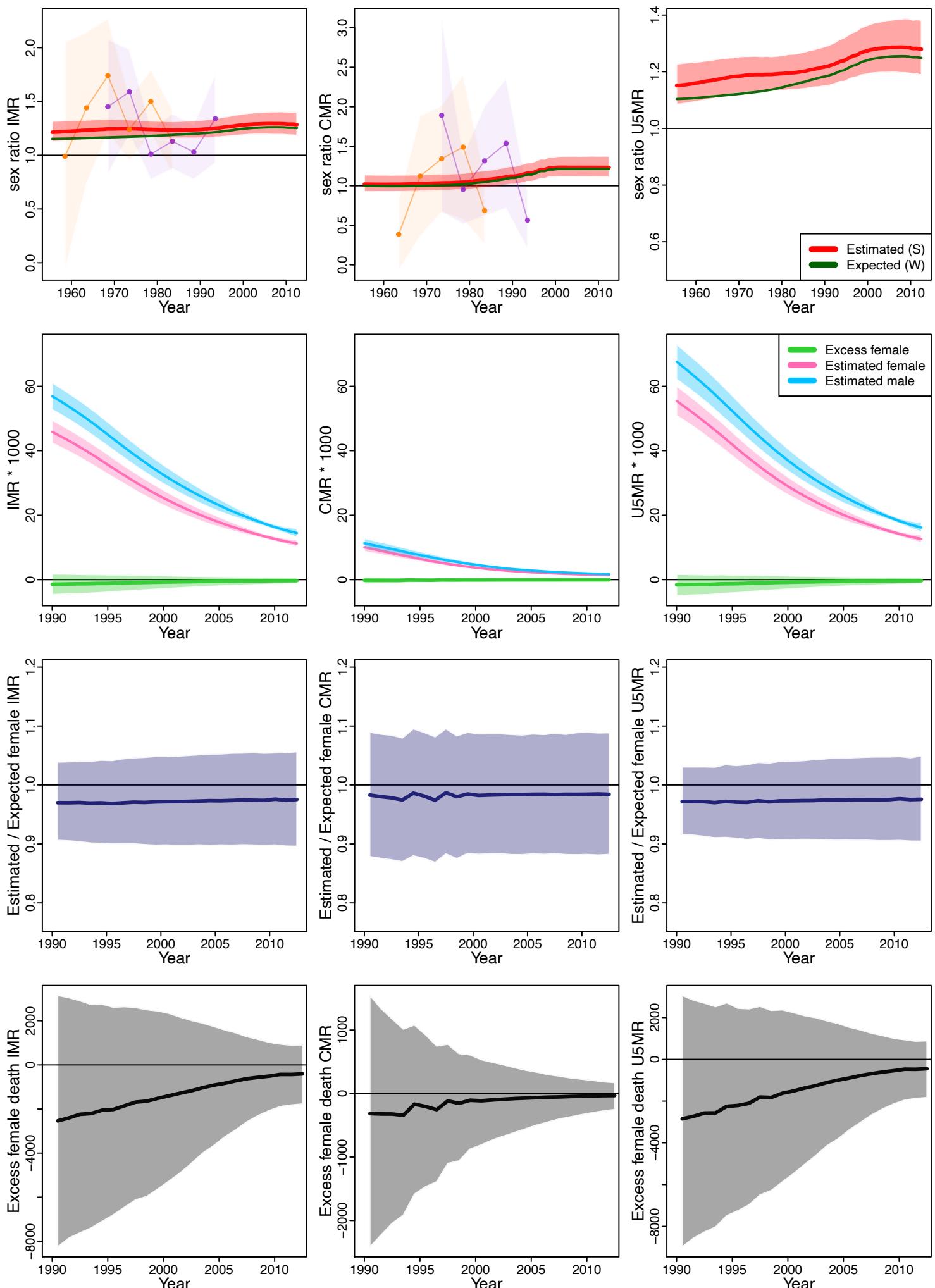
# Bosnia and Herzegovina



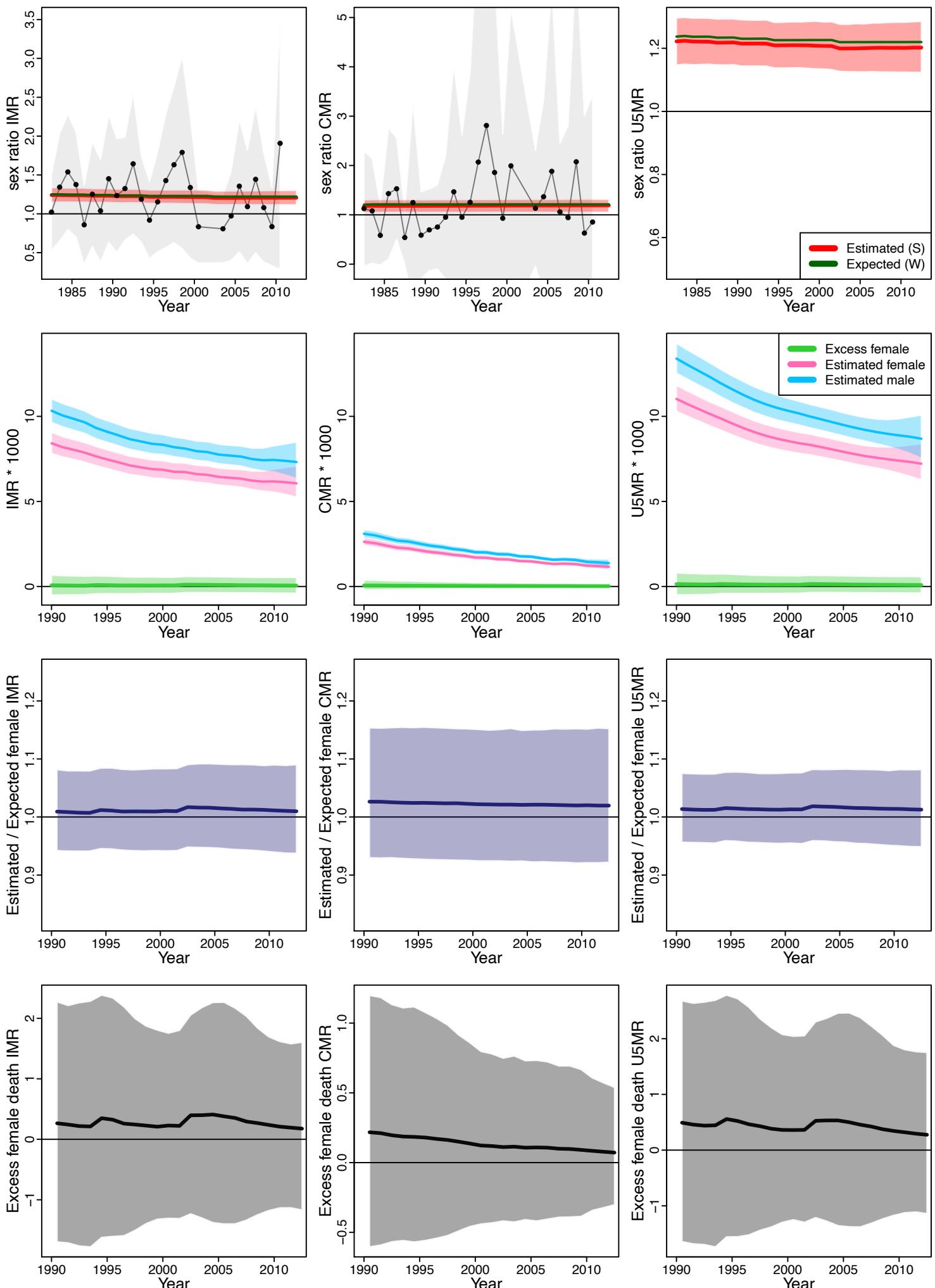
# Botswana



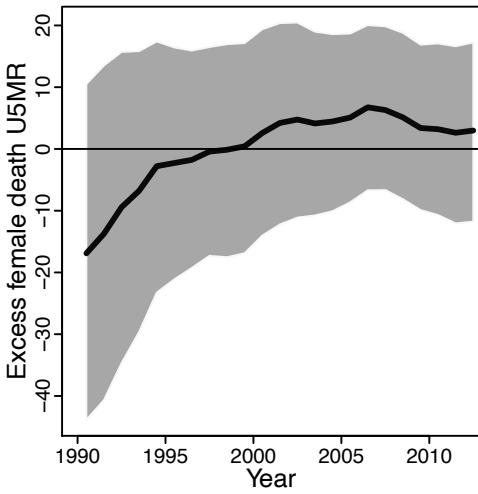
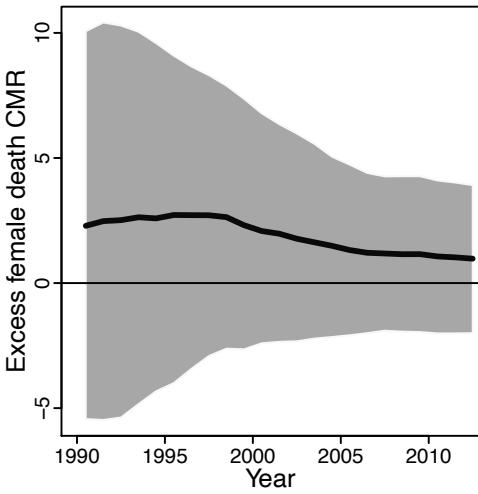
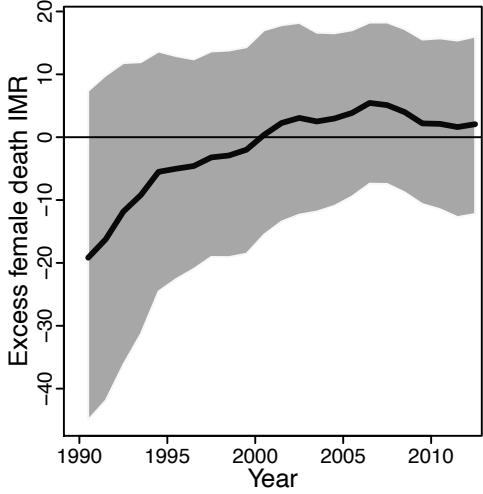
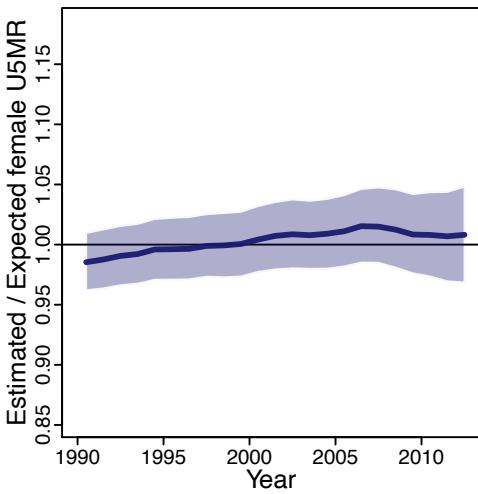
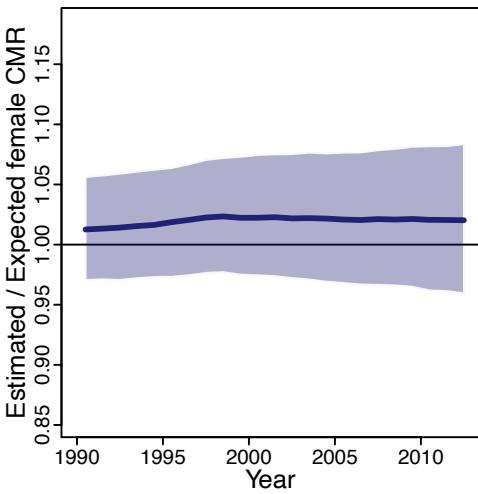
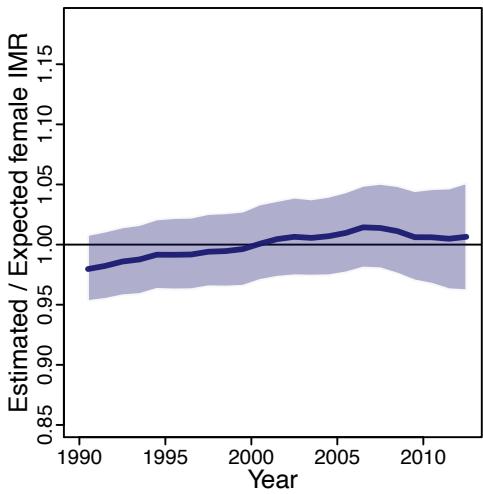
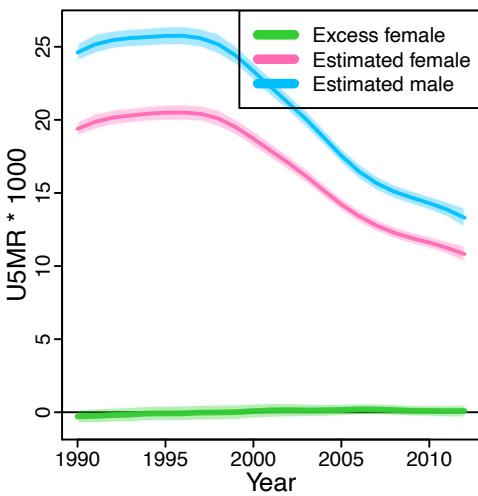
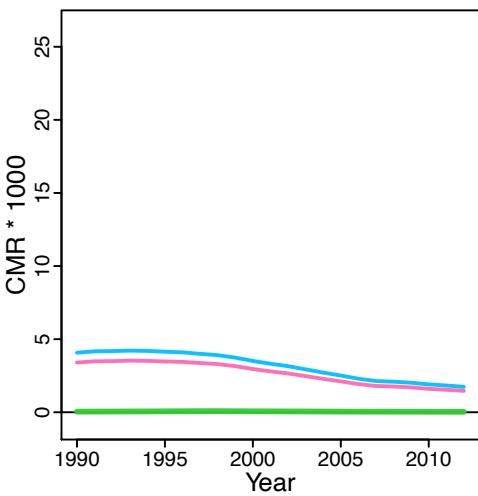
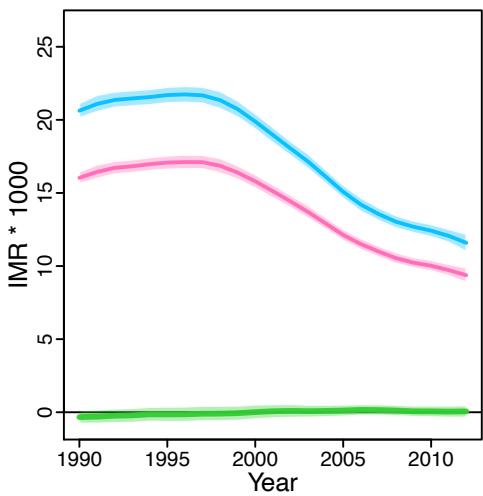
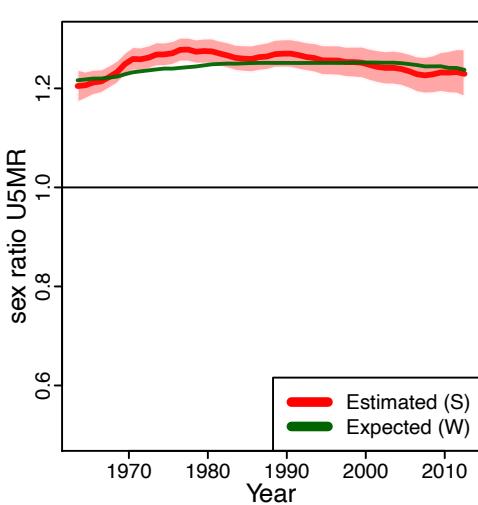
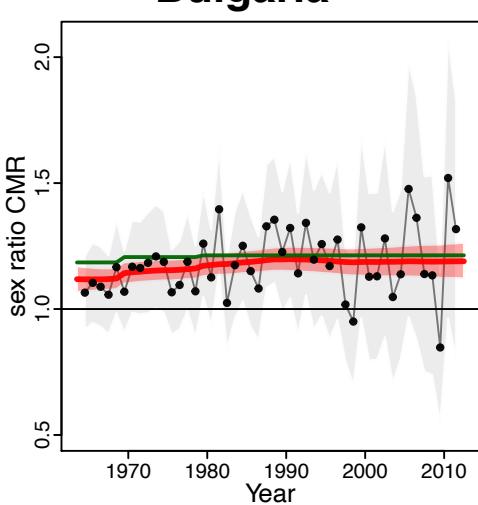
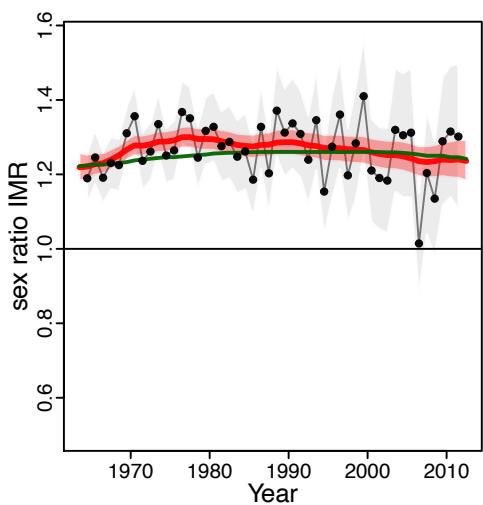
# Brazil



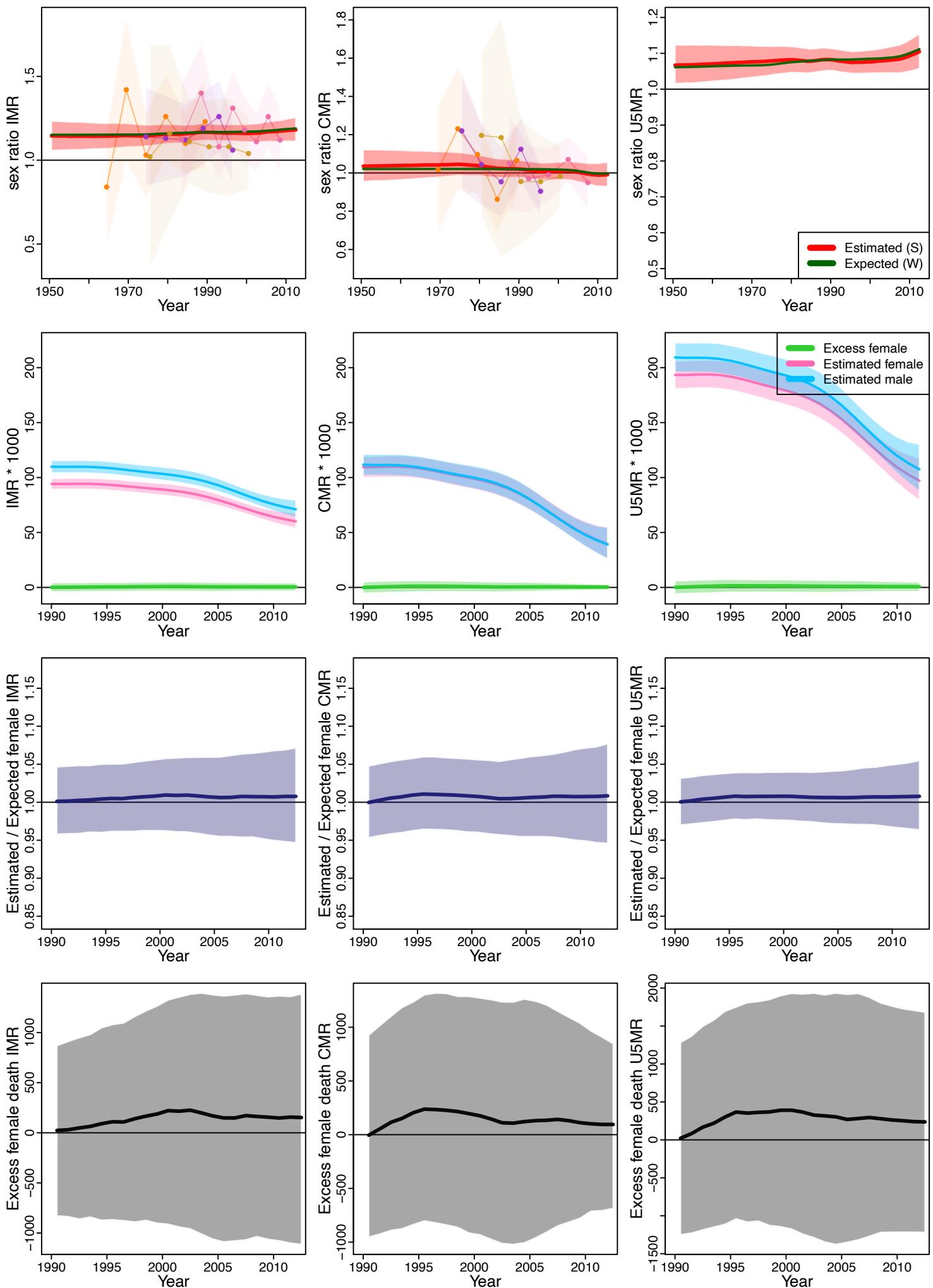
# Brunei



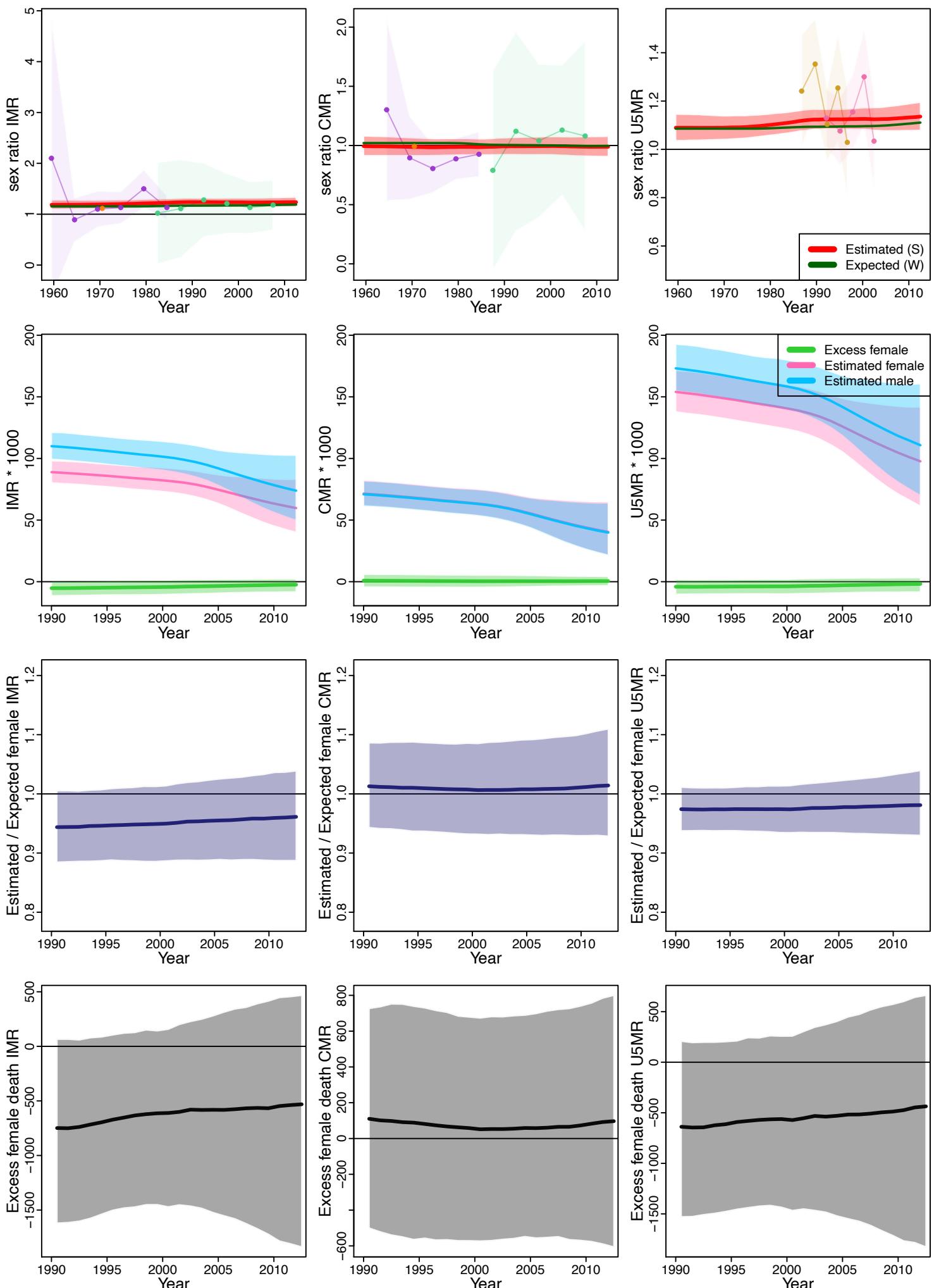
# Bulgaria



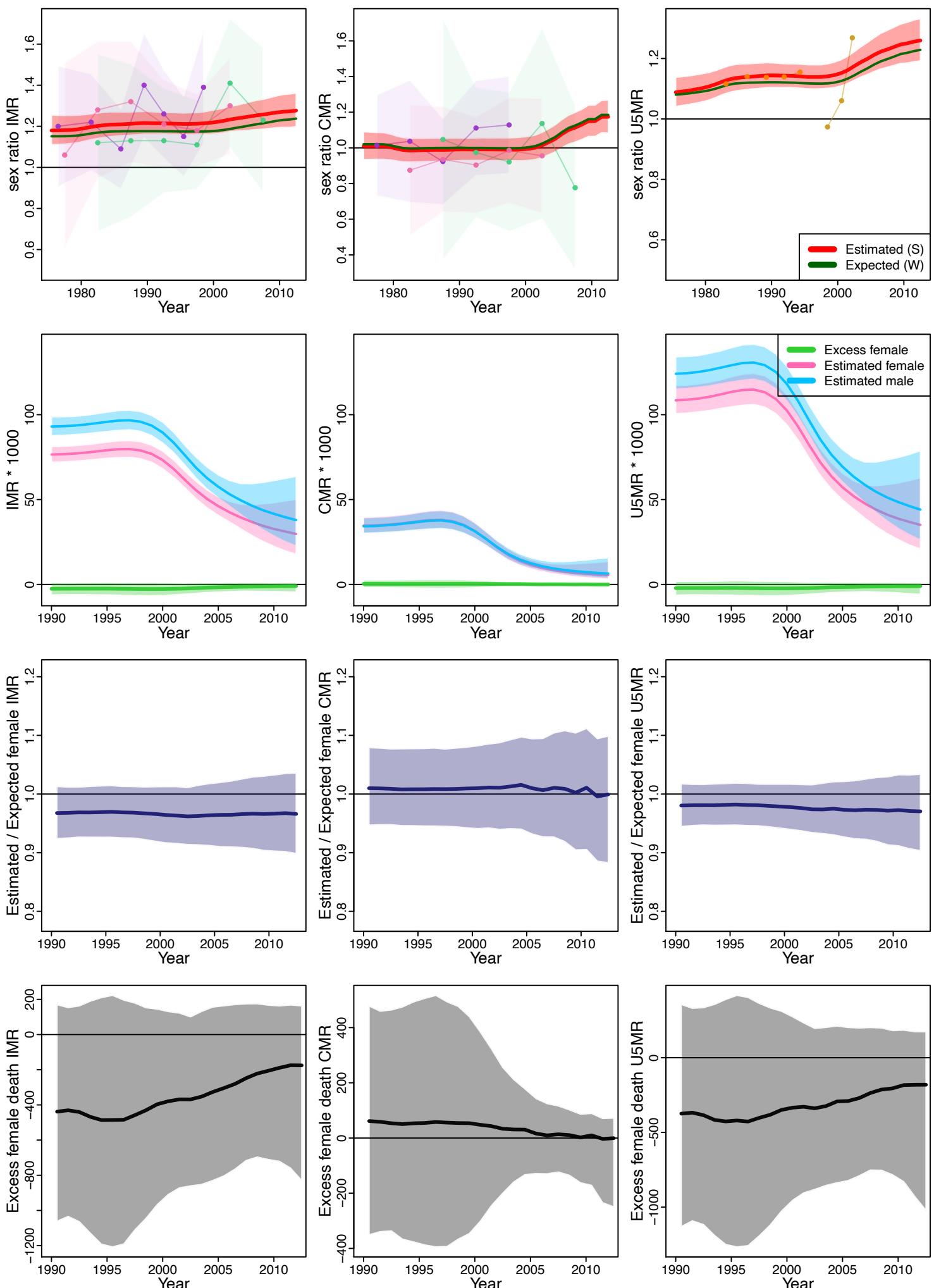
# Burkina Faso



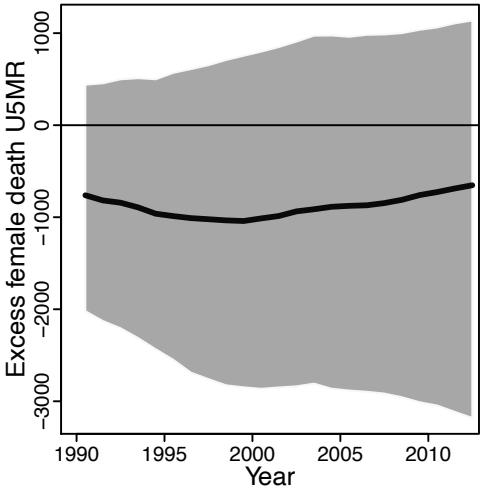
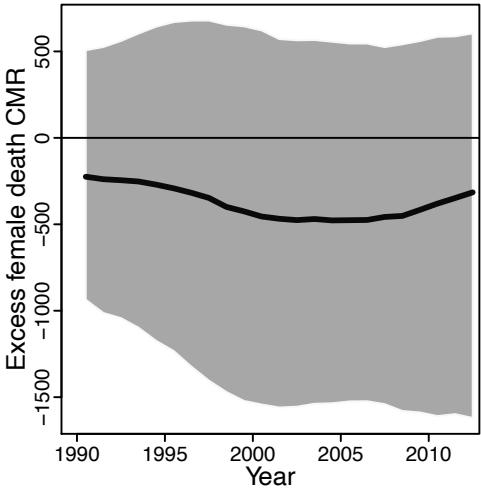
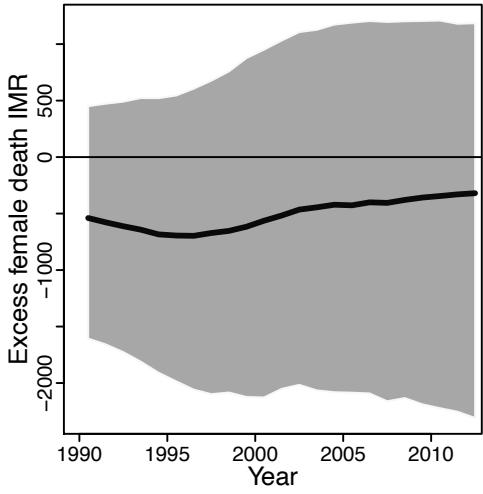
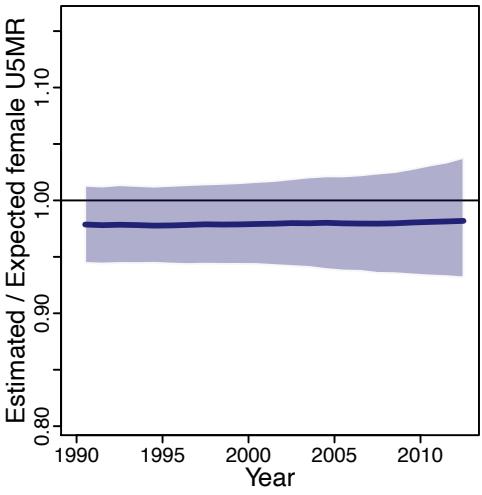
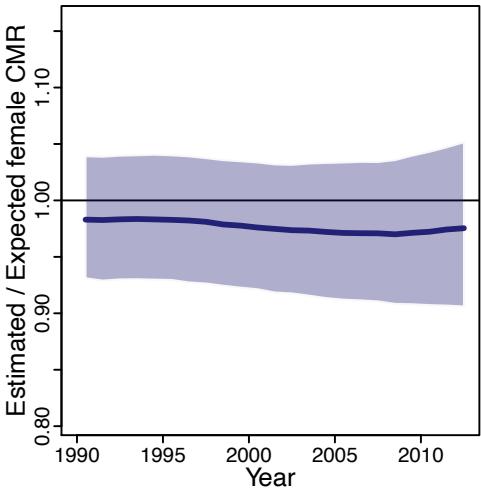
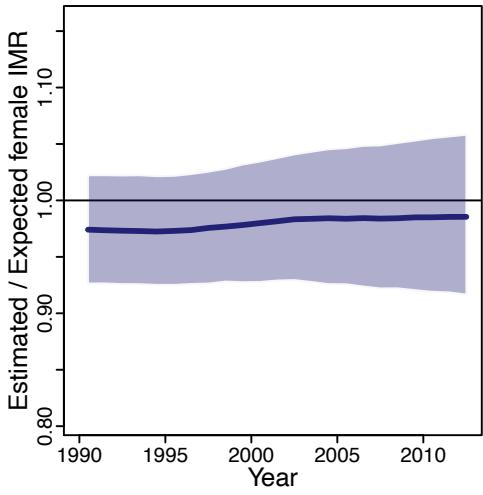
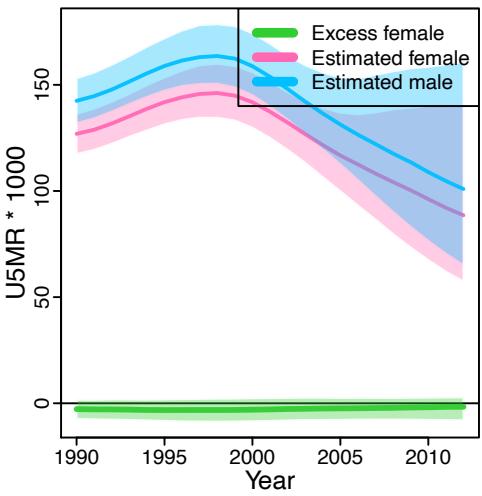
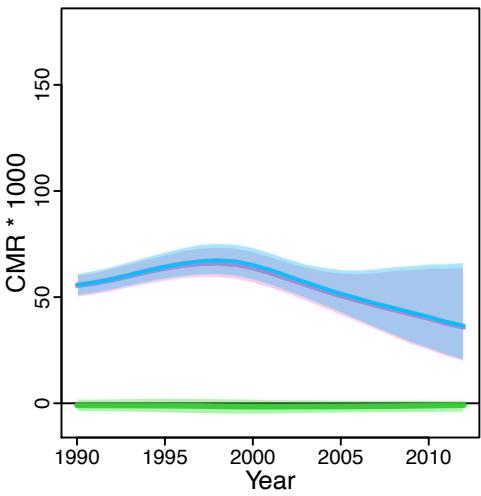
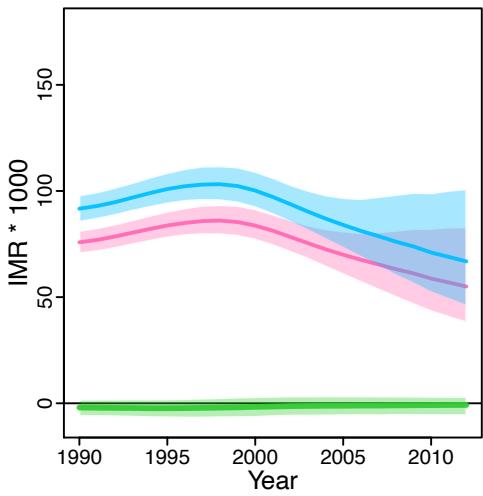
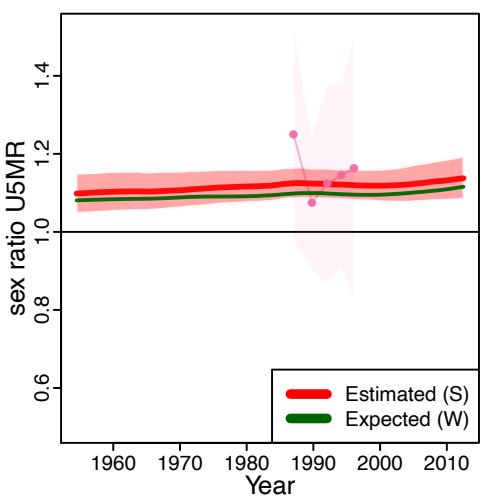
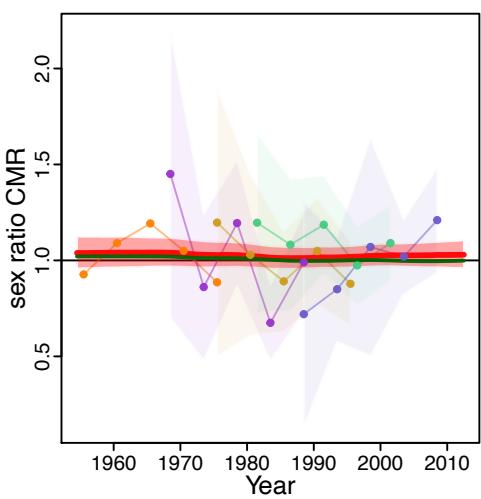
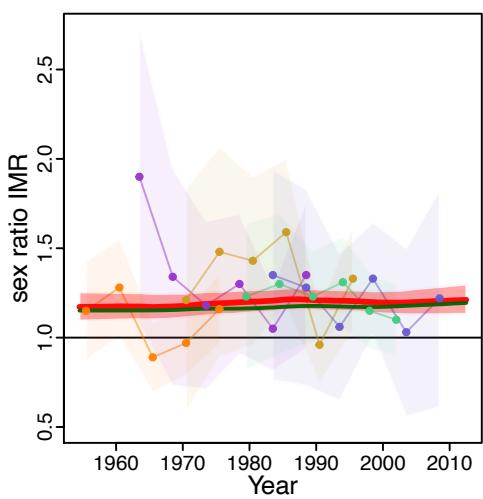
# Burundi



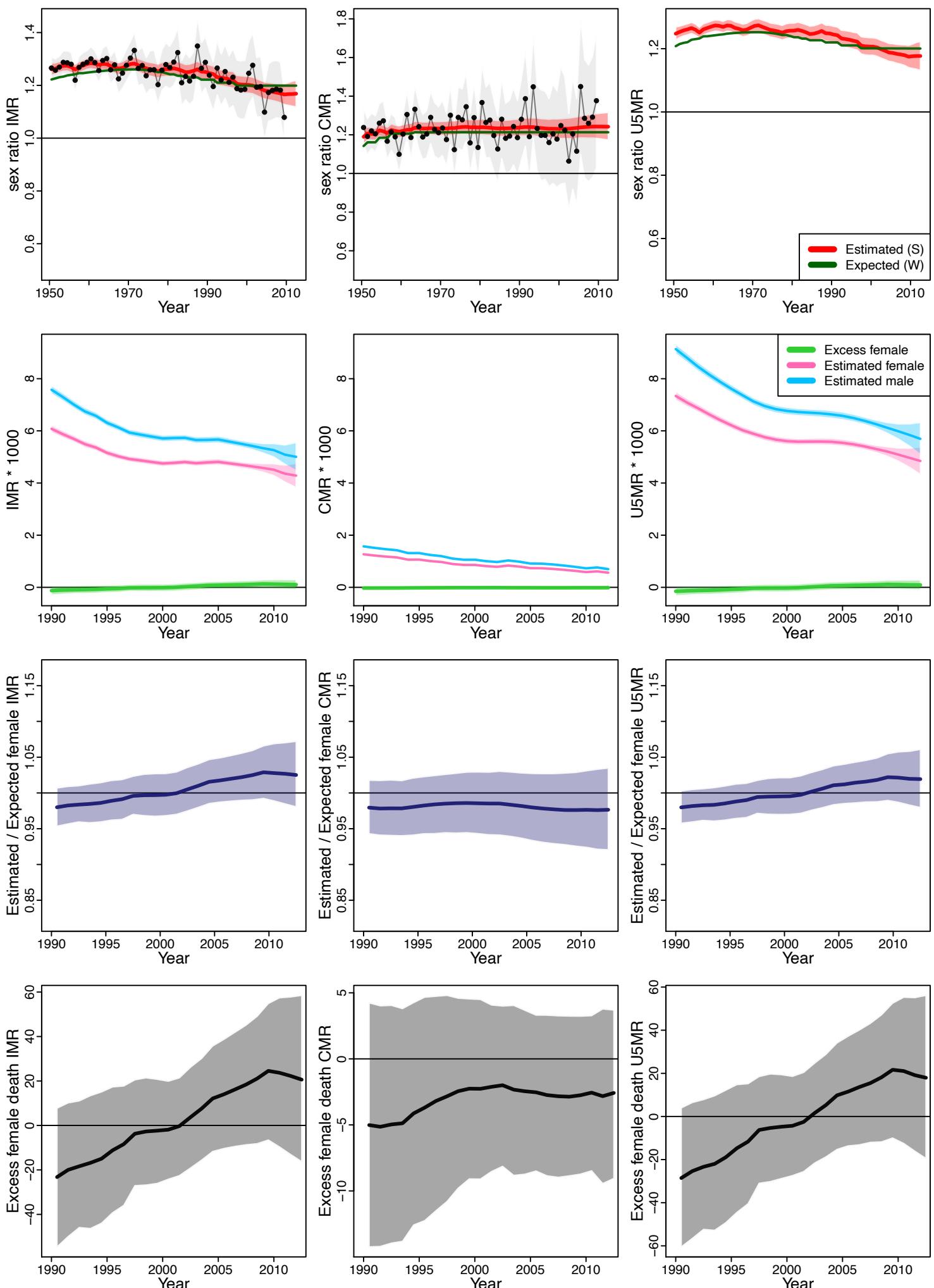
# Cambodia



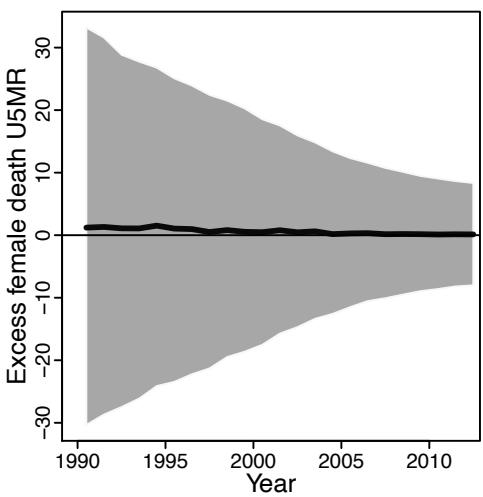
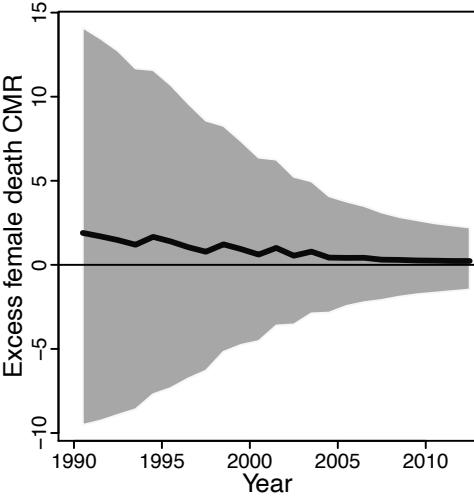
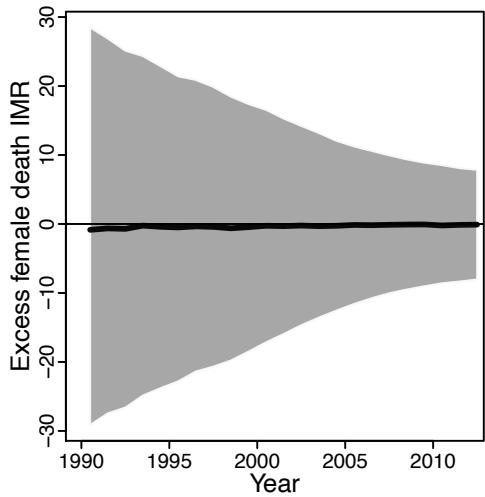
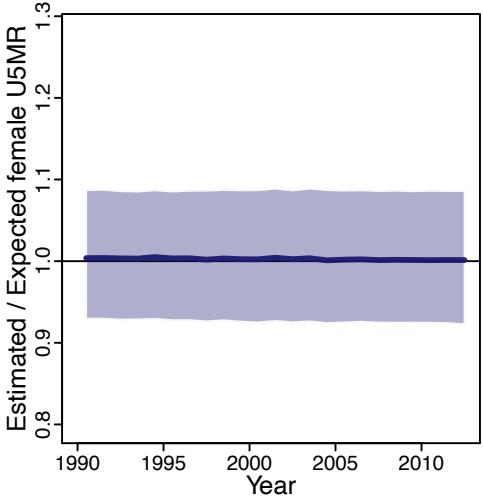
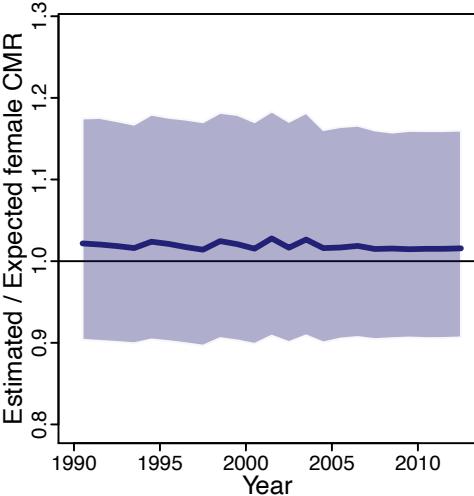
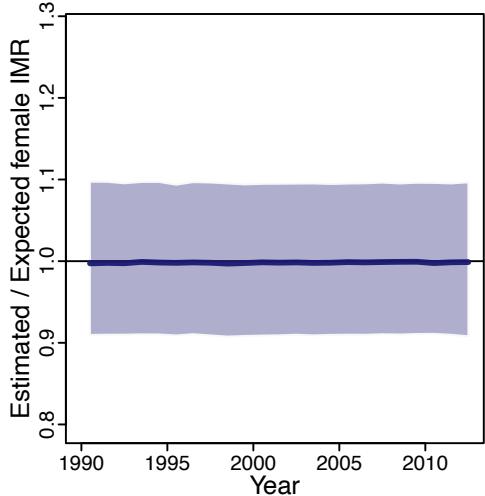
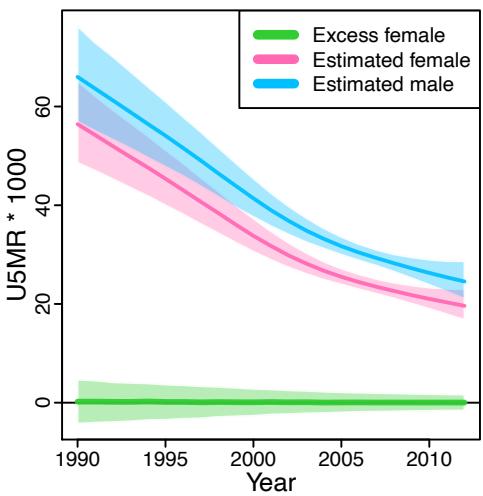
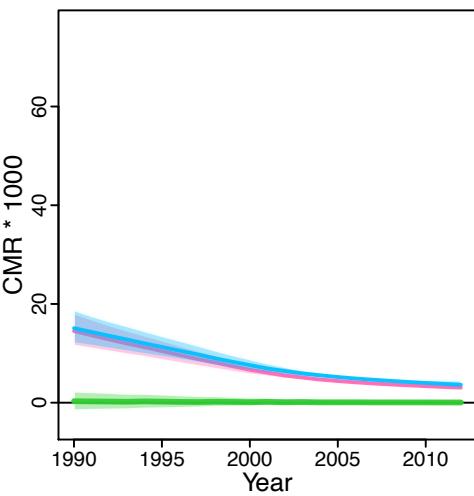
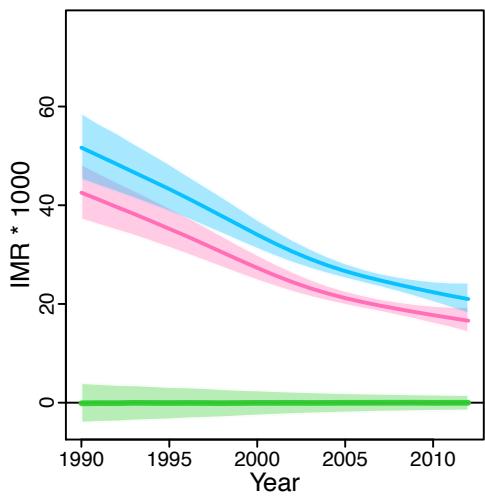
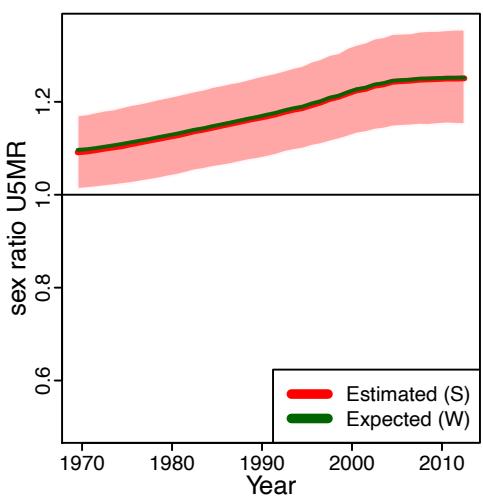
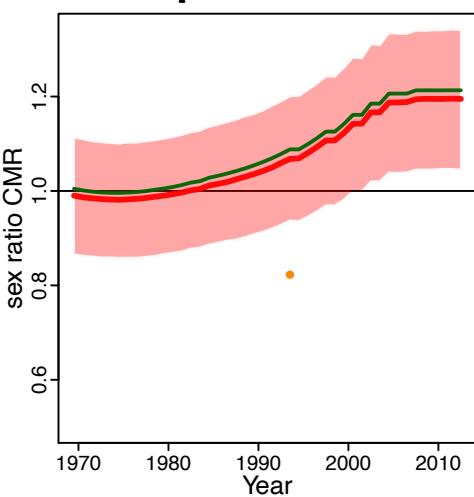
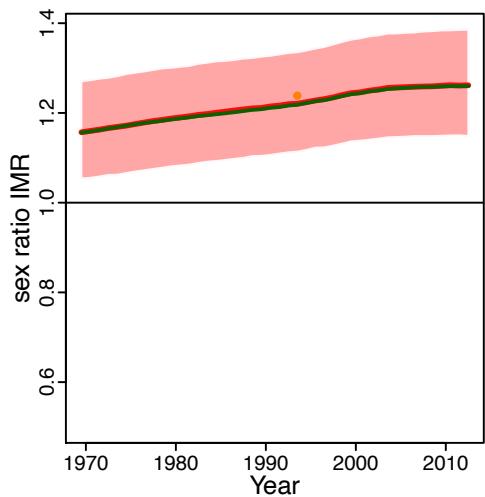
# Cameroon



# Canada



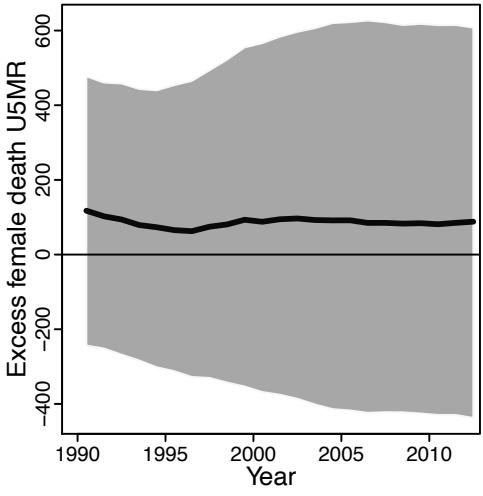
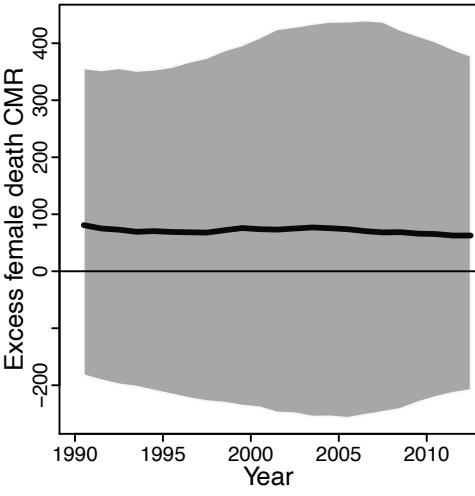
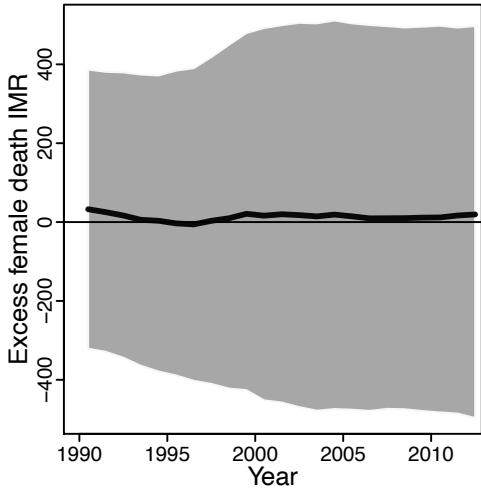
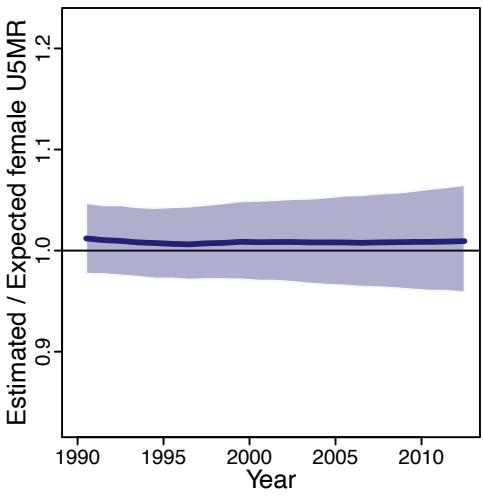
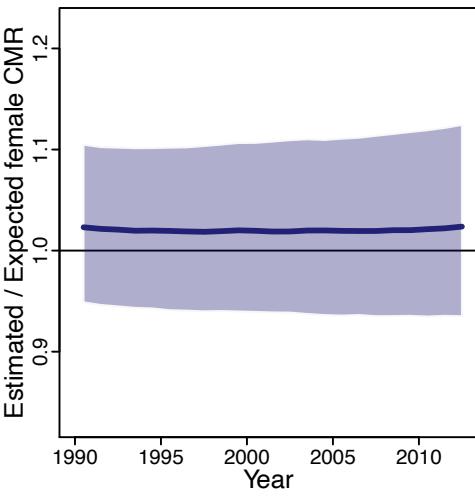
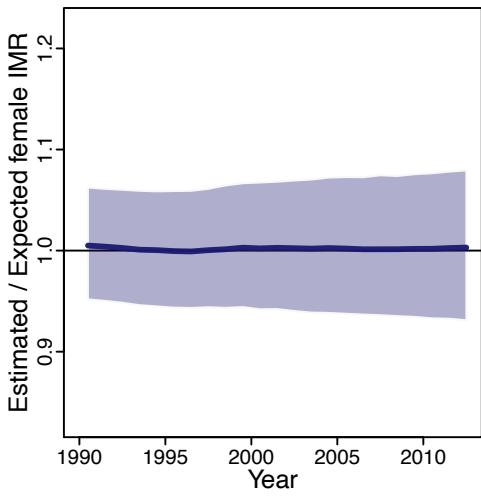
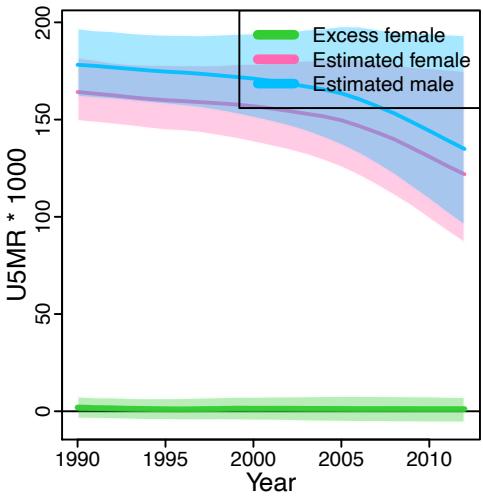
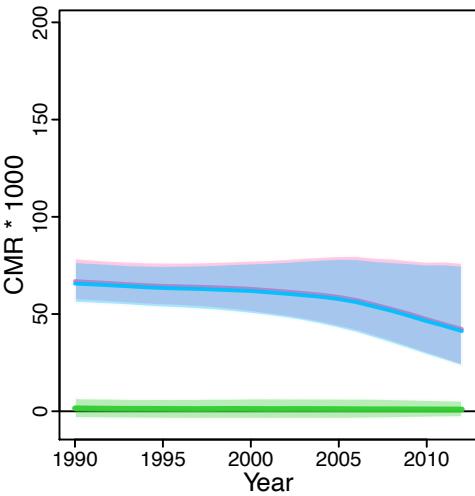
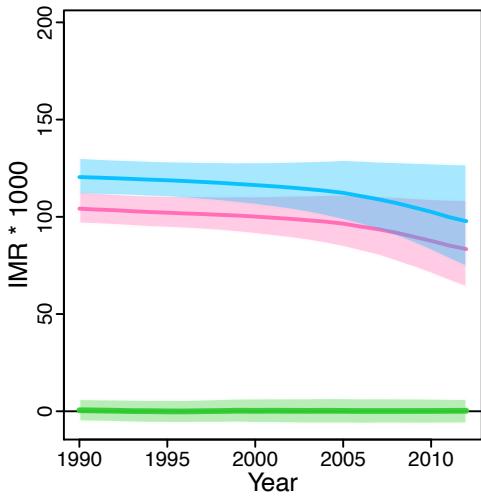
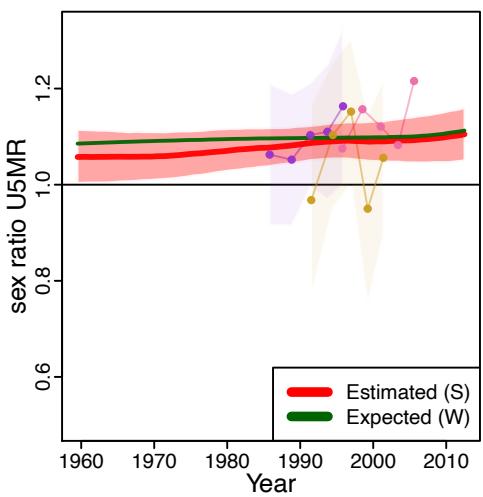
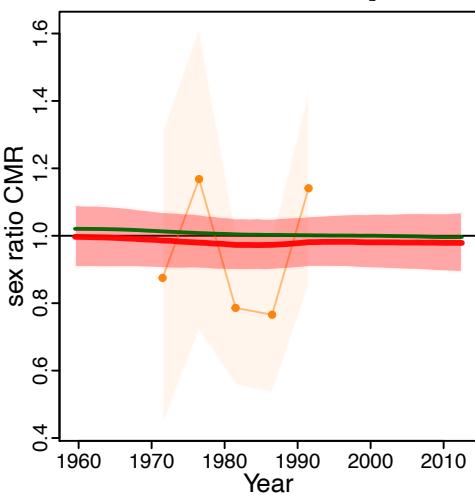
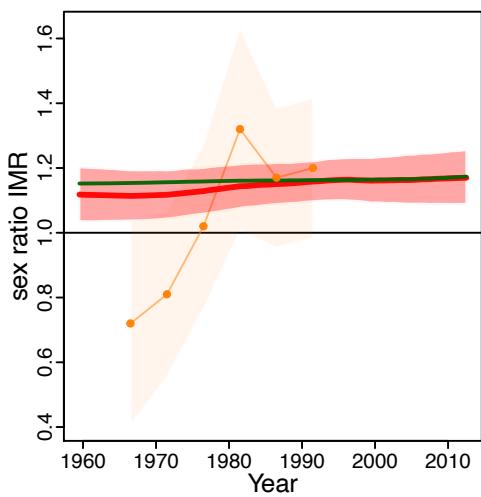
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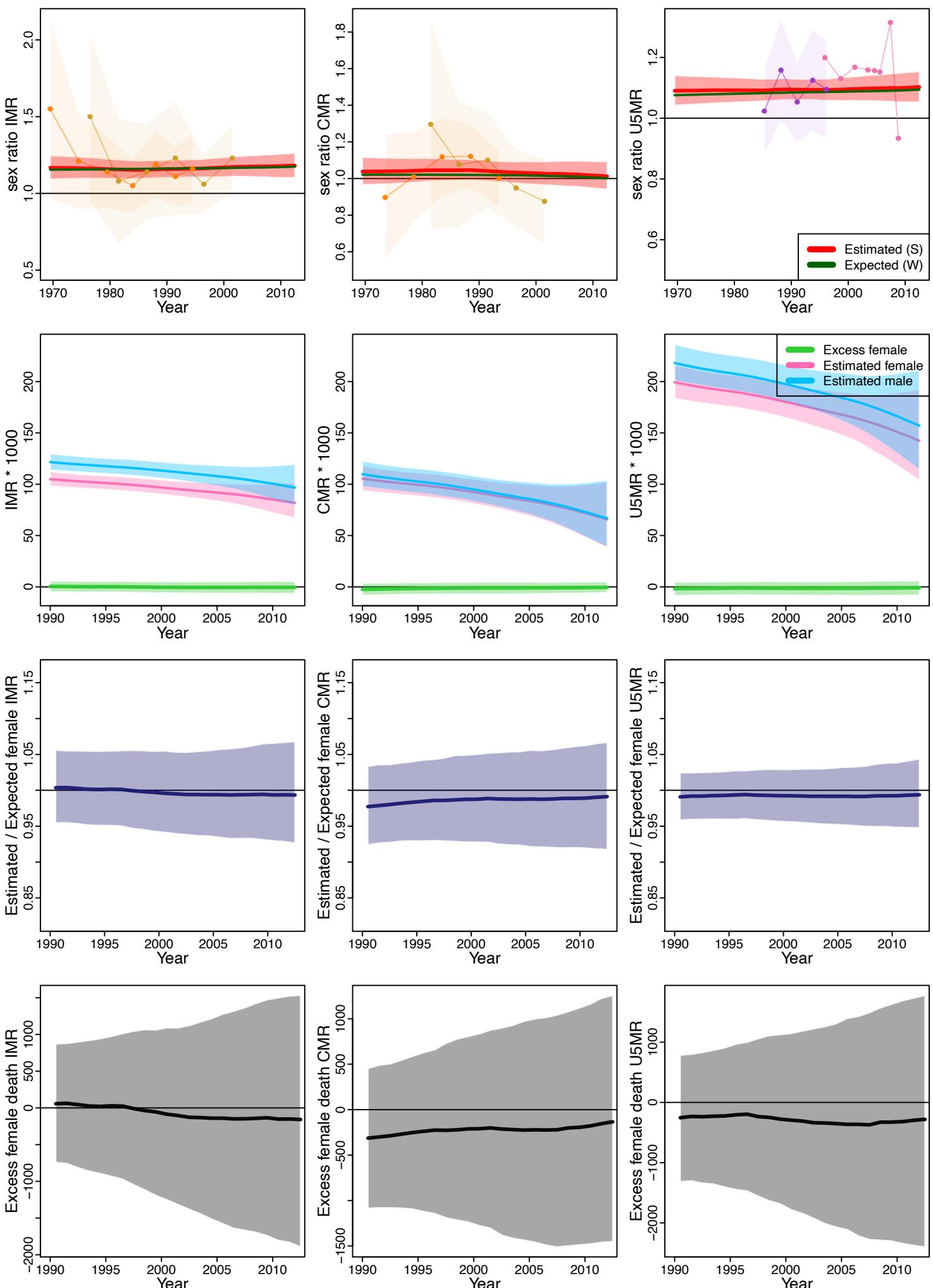
Estimated (S)  
Expected (W)

Excess female  
Estimated female  
Estimated male

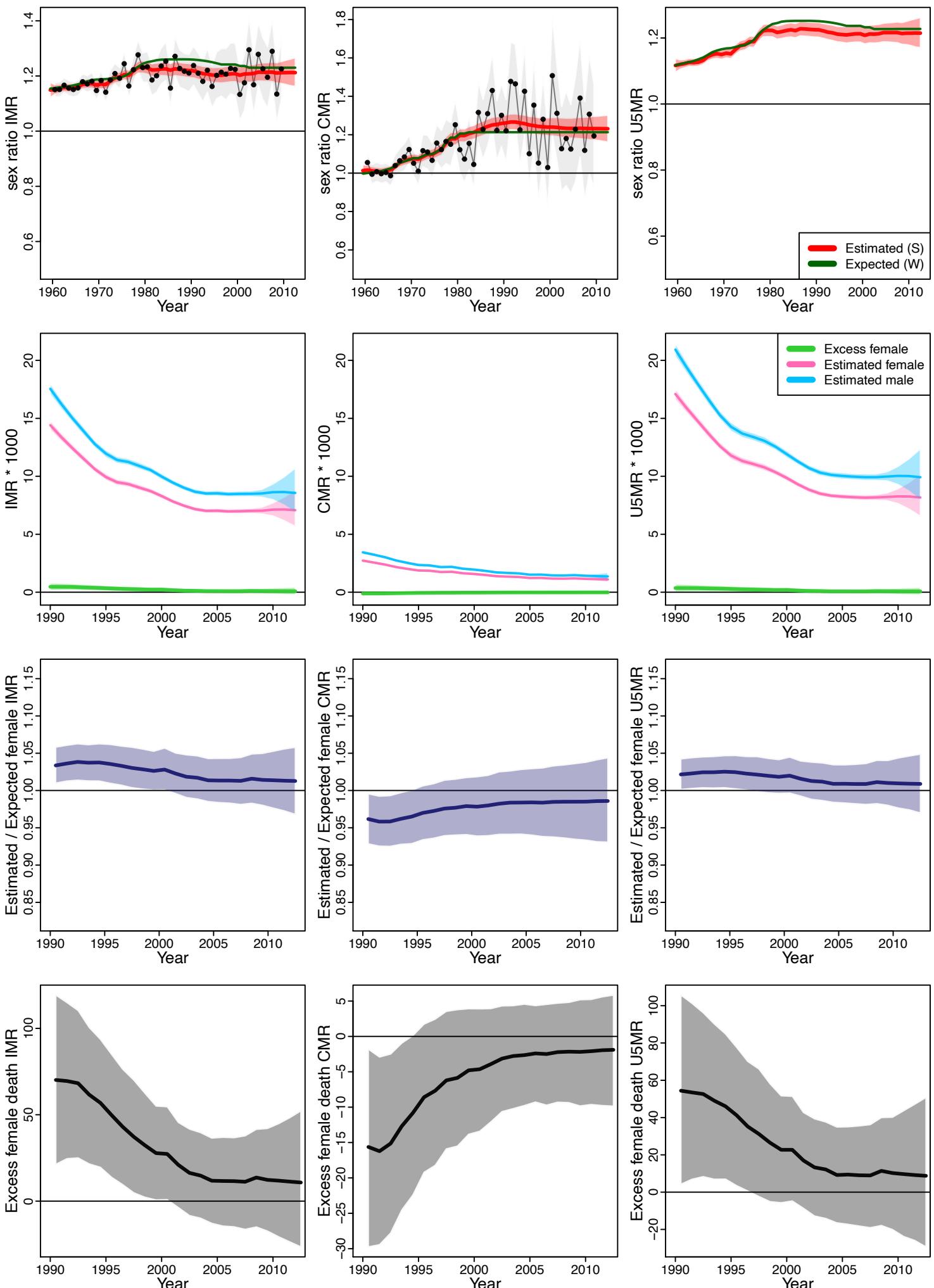
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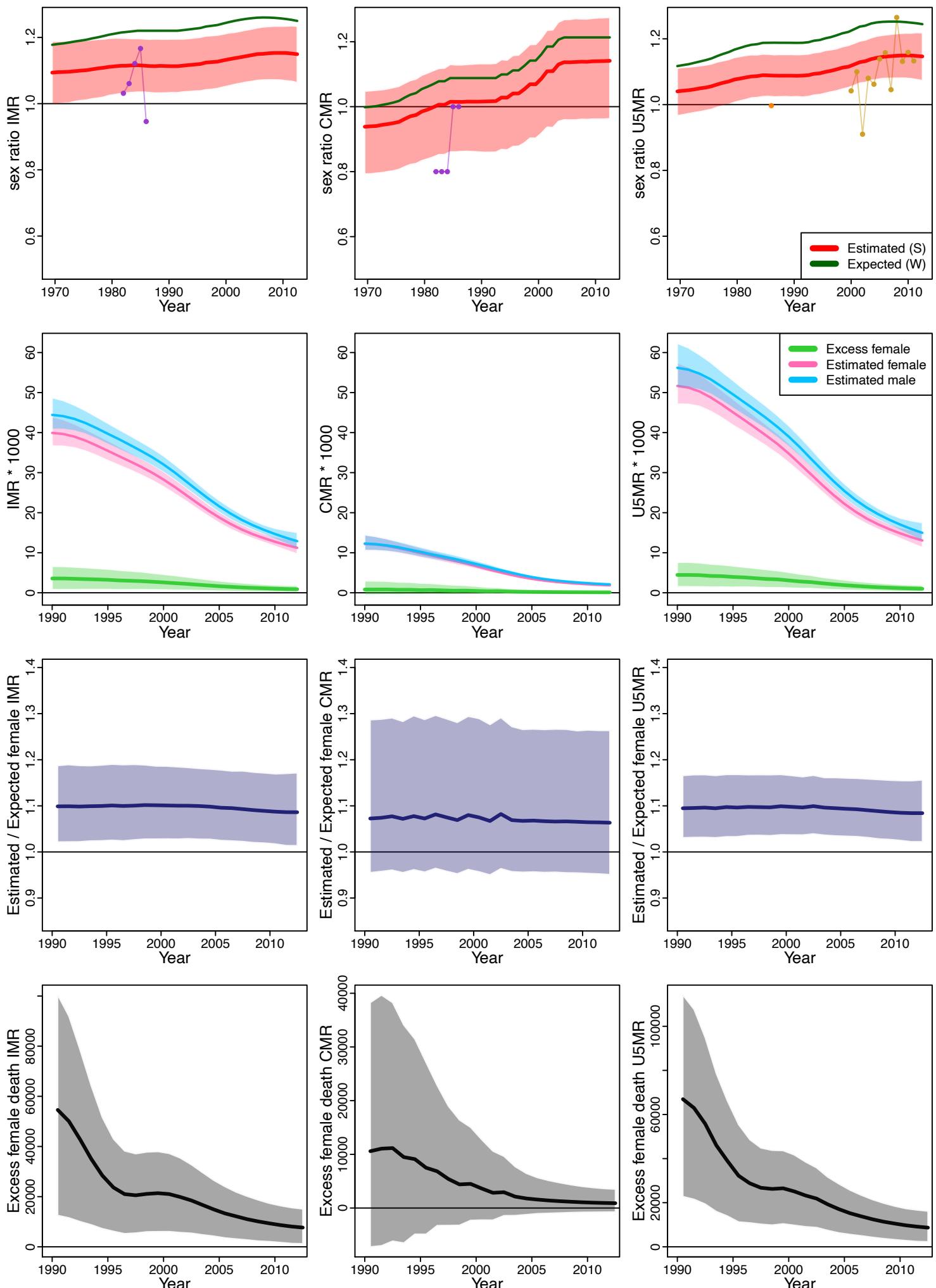
# Chad



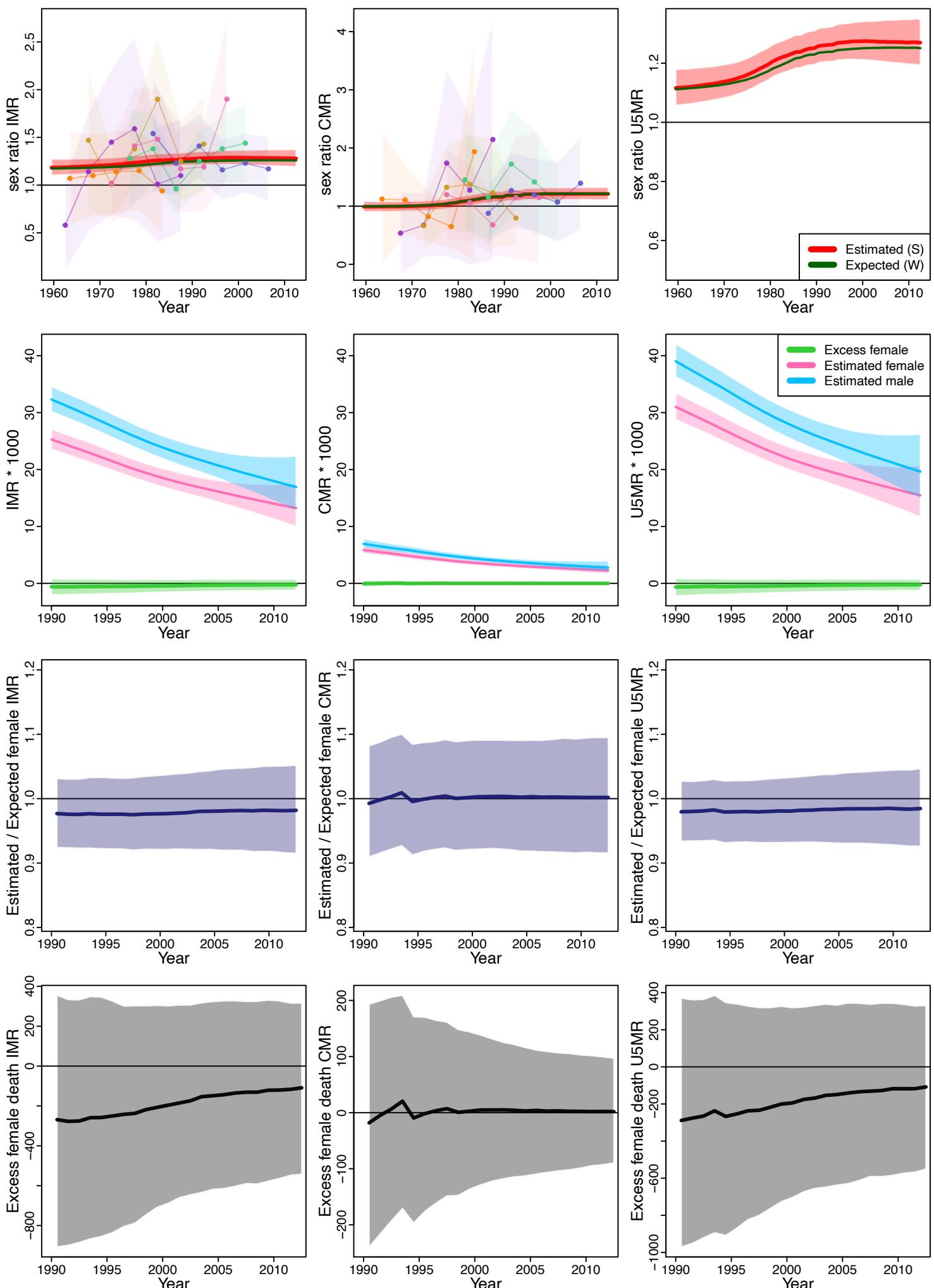
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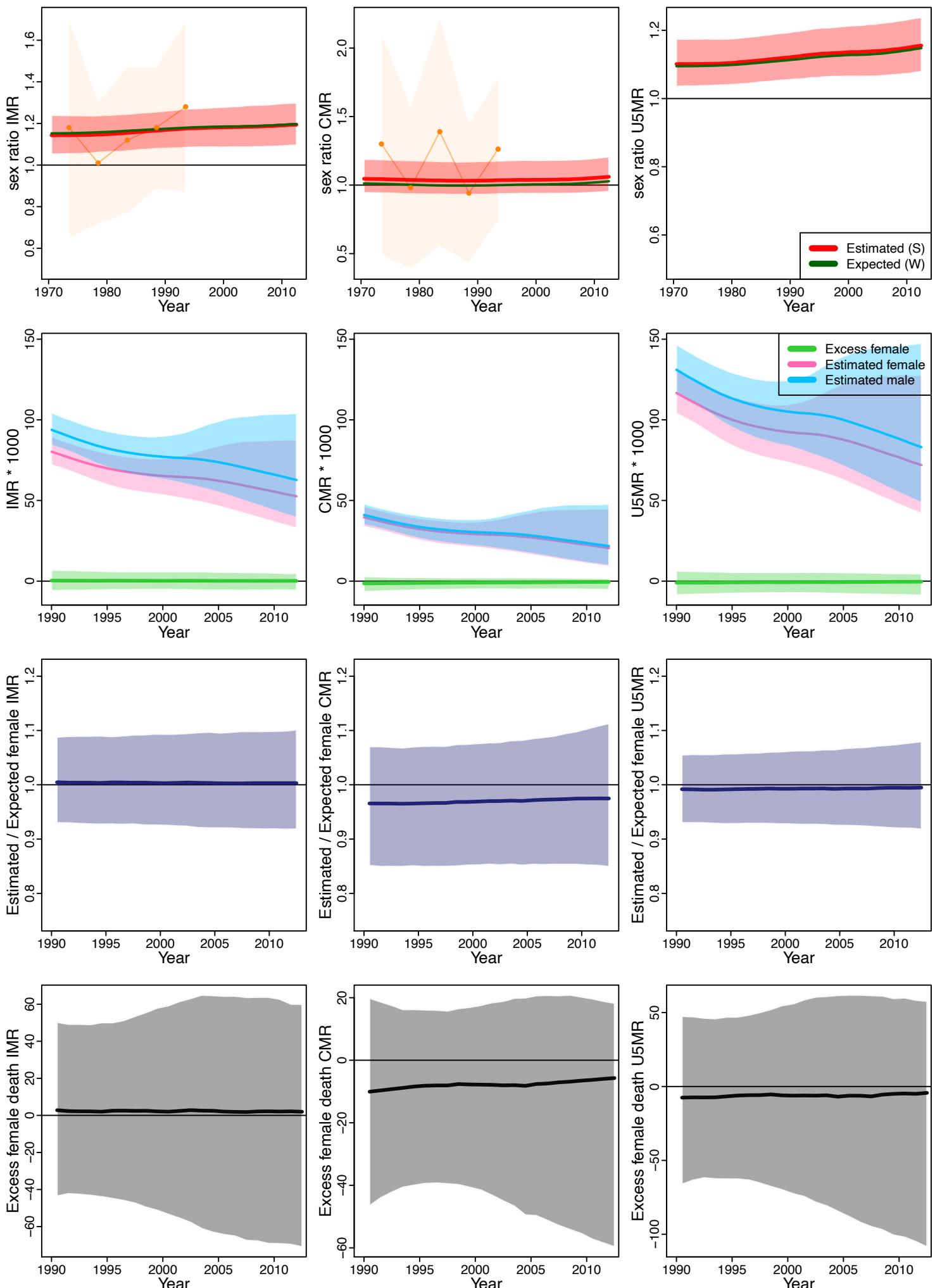
# China



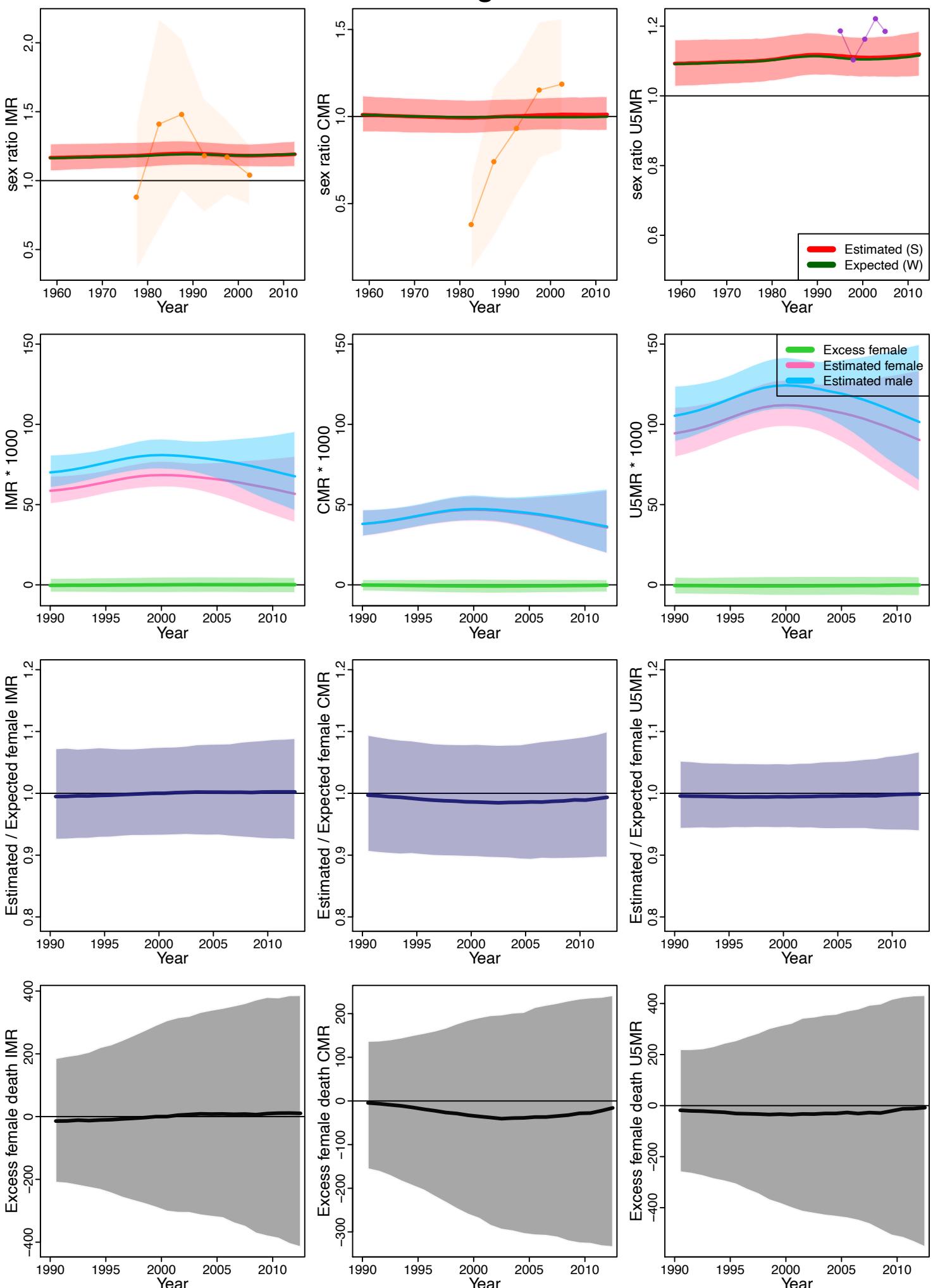
# Colombia



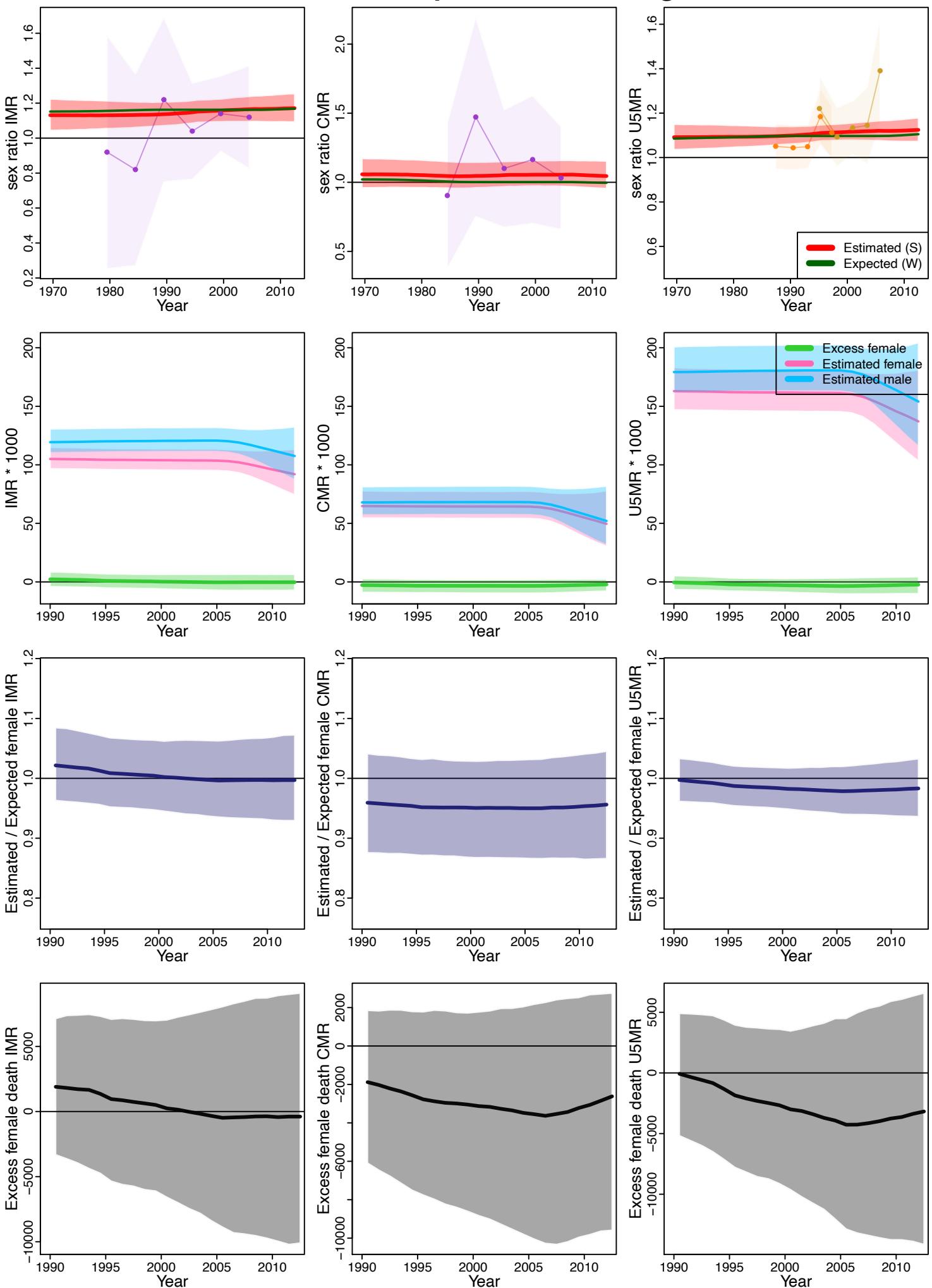
# Comoros



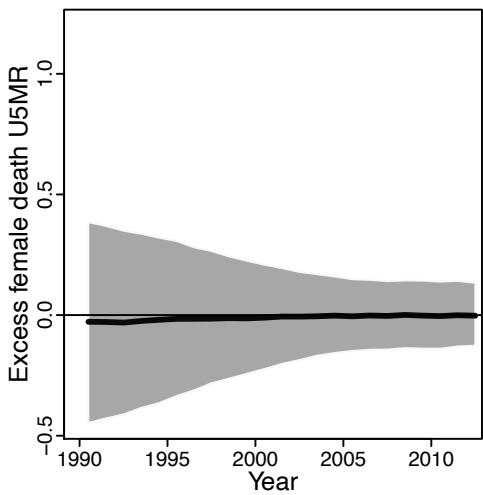
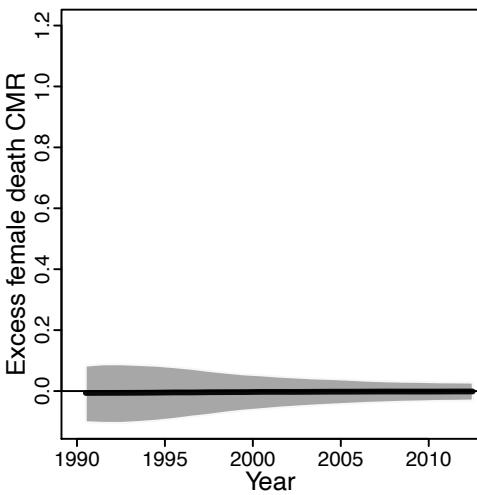
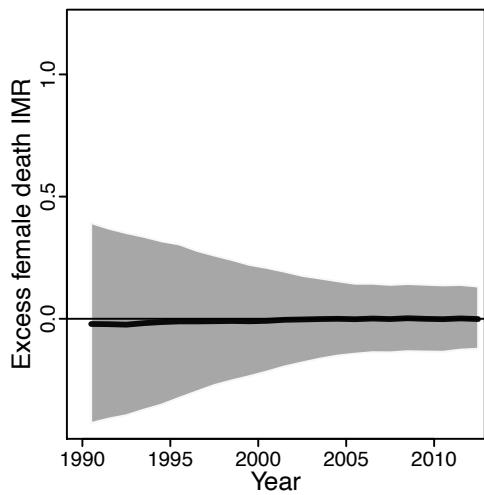
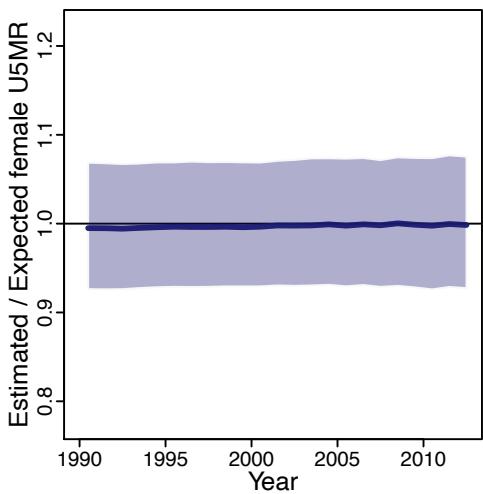
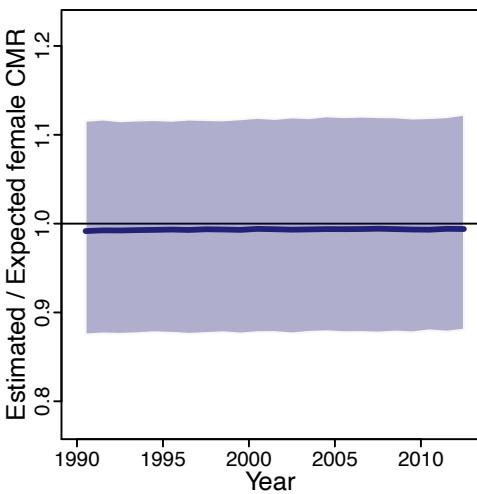
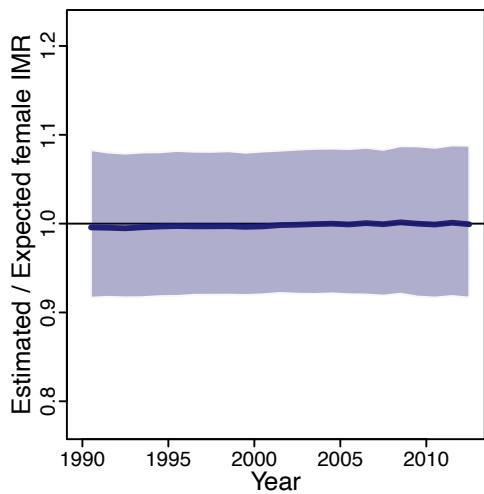
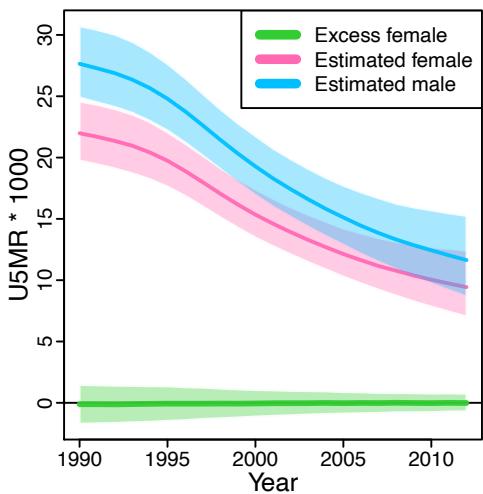
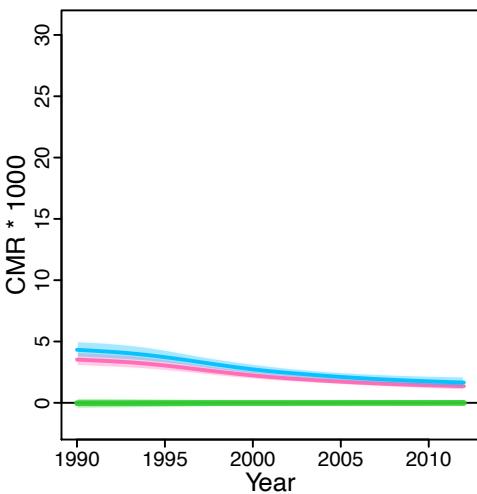
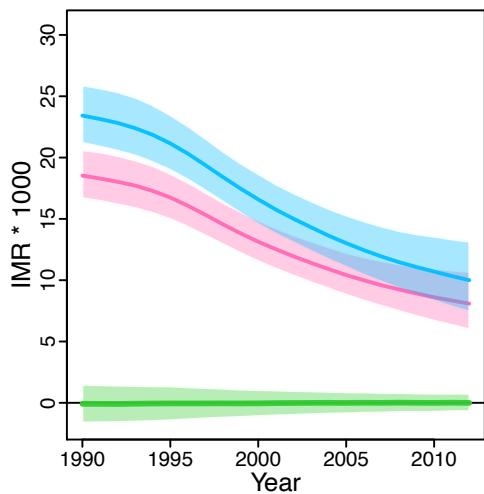
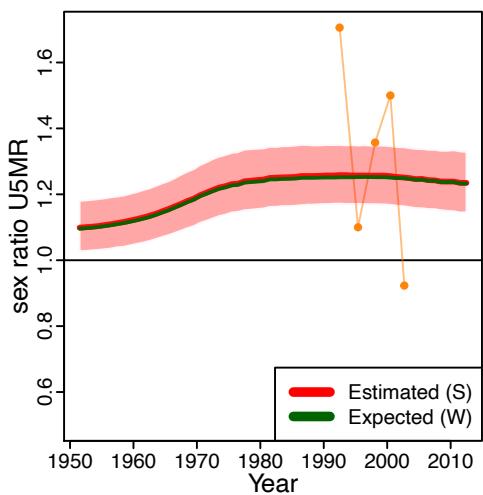
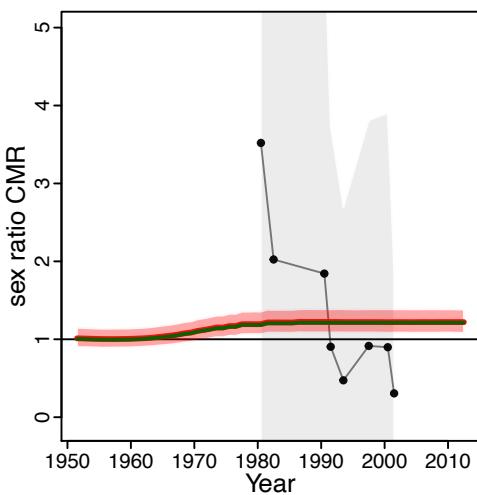
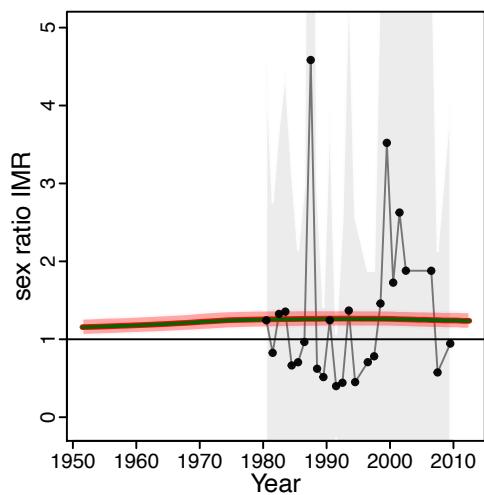
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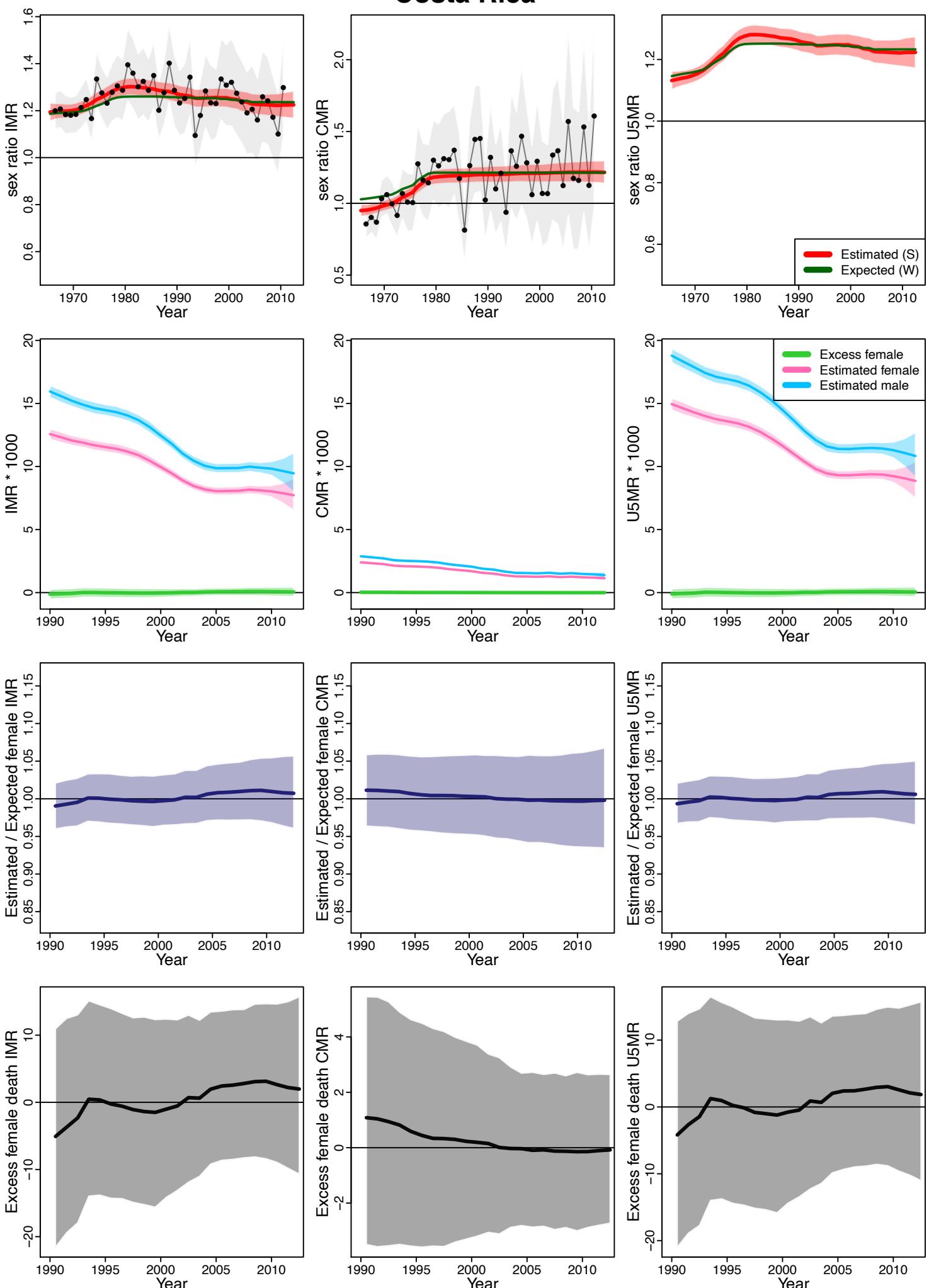
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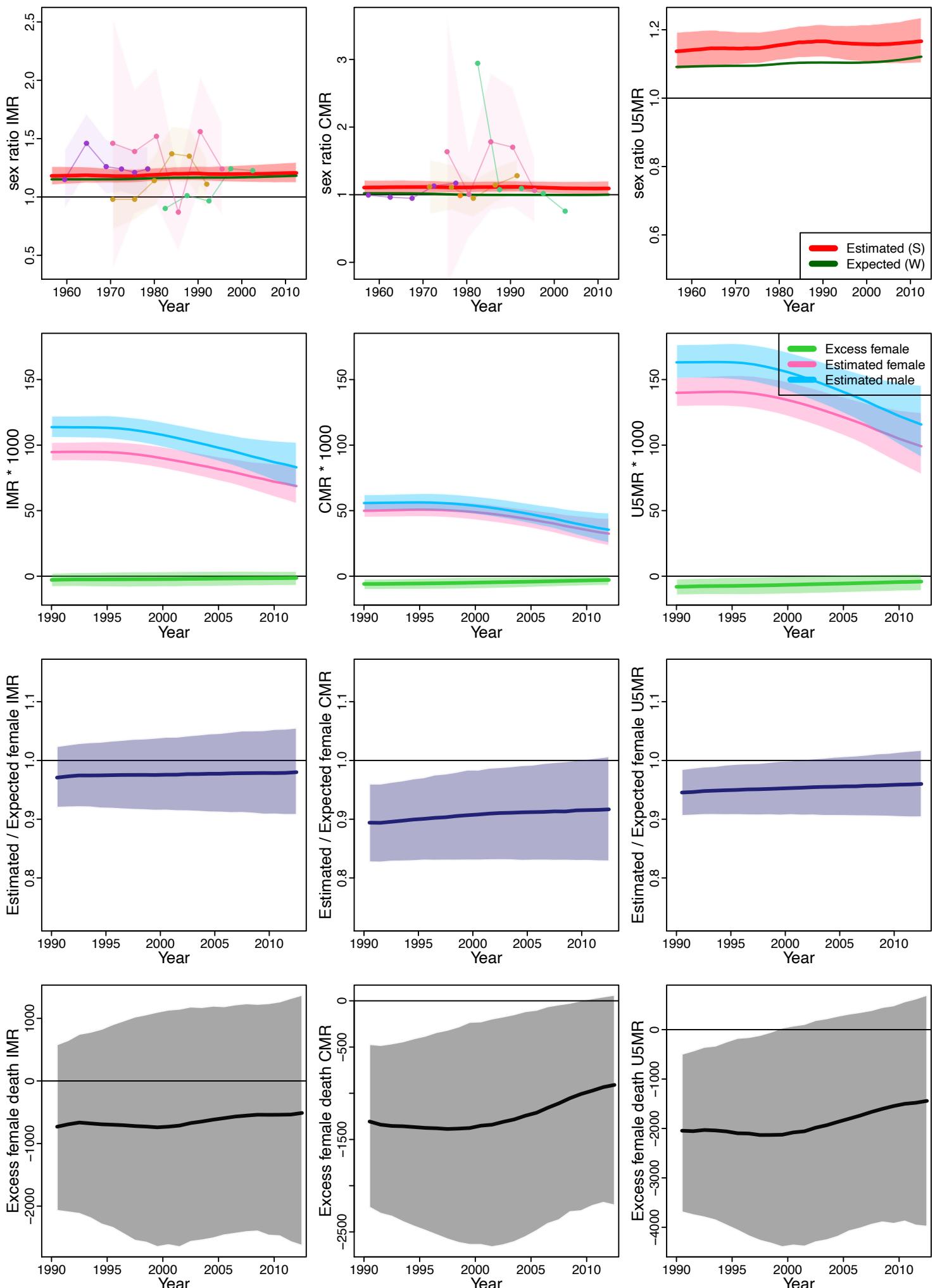
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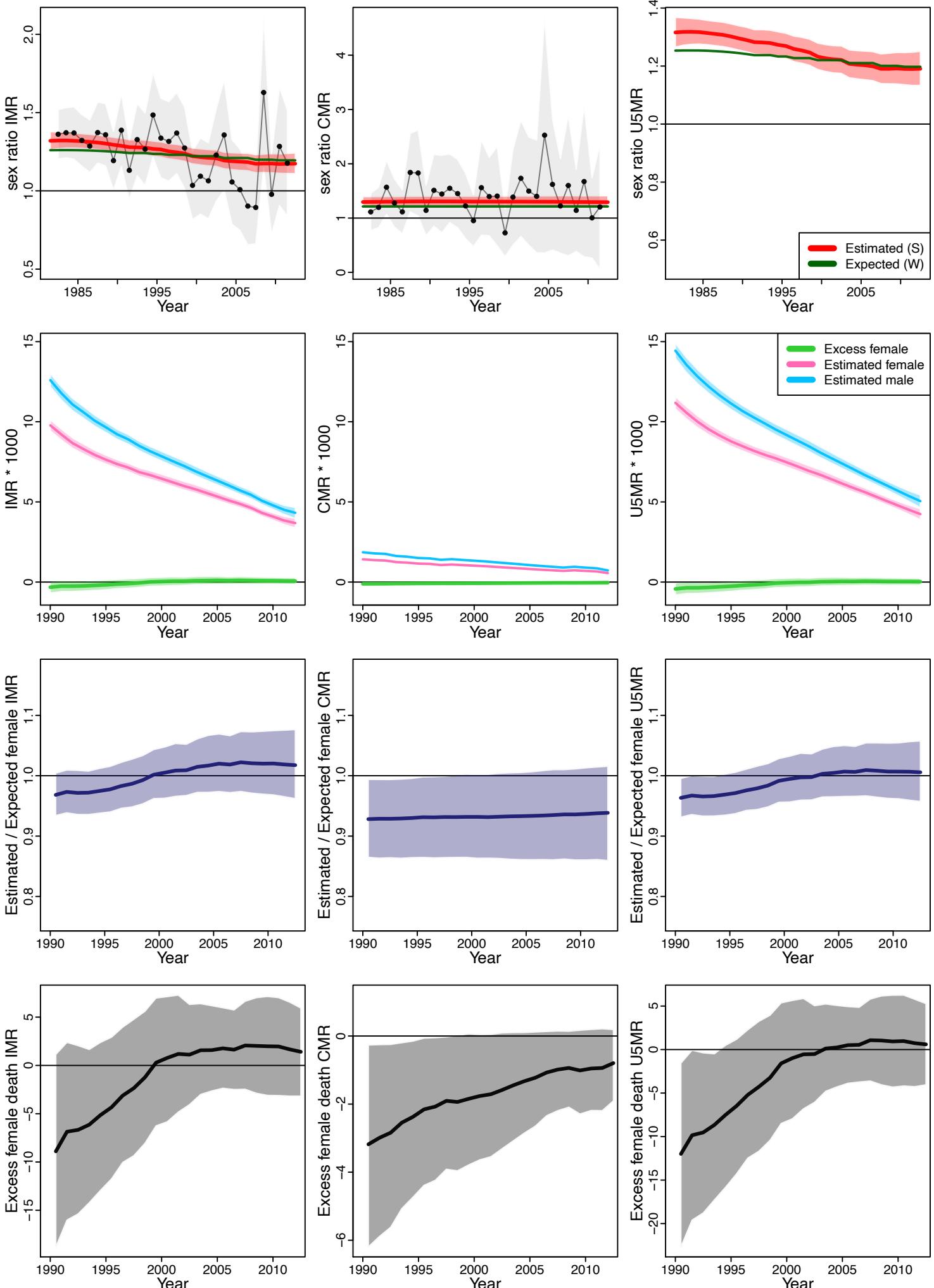
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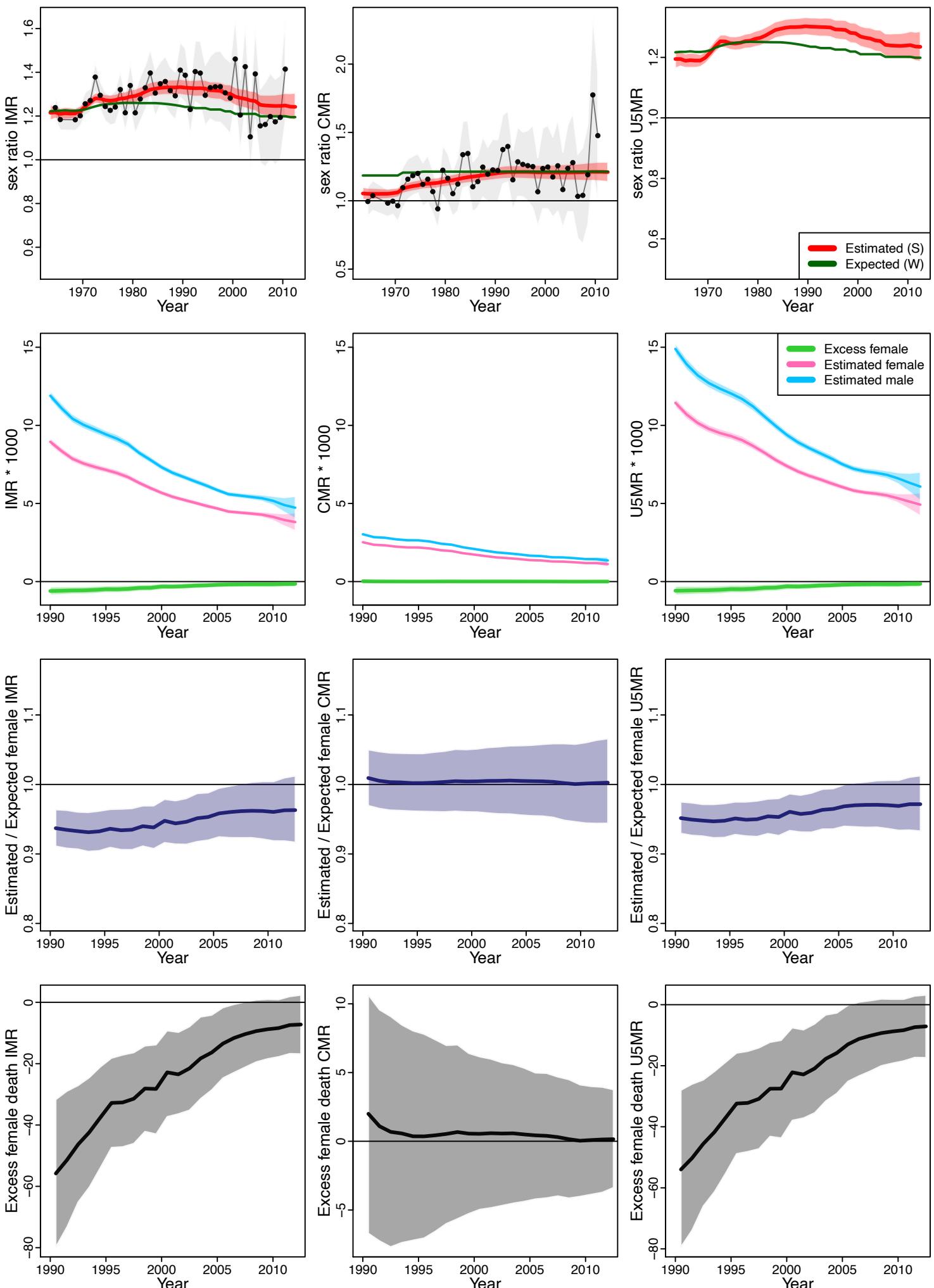
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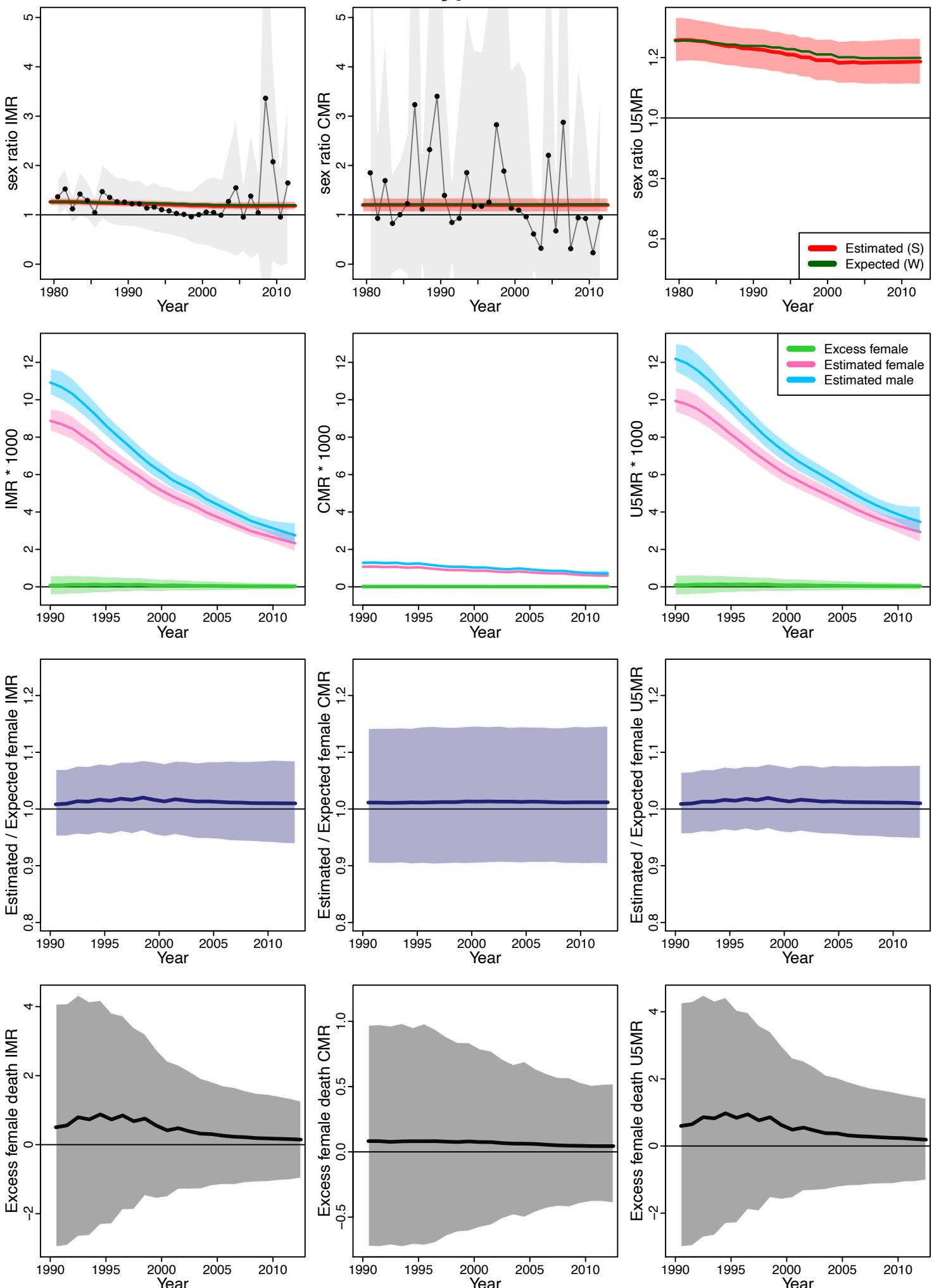
# Croatia



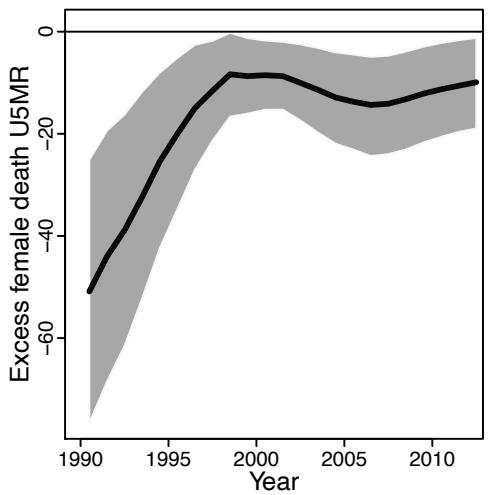
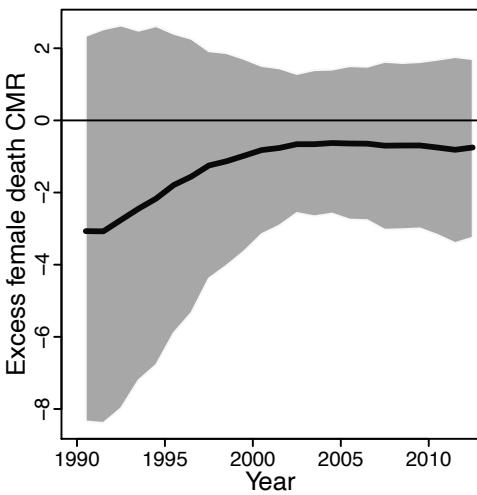
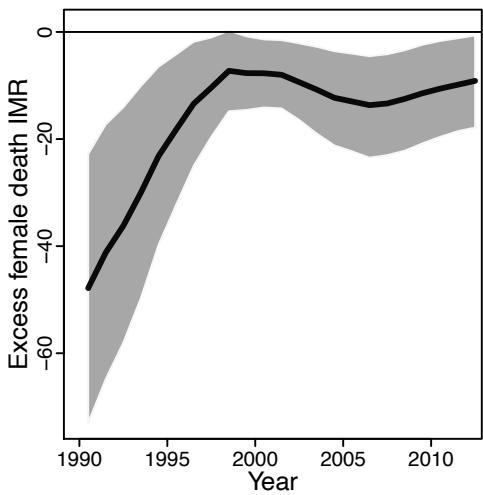
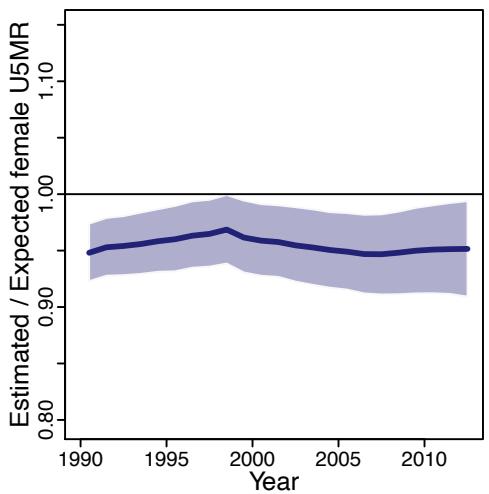
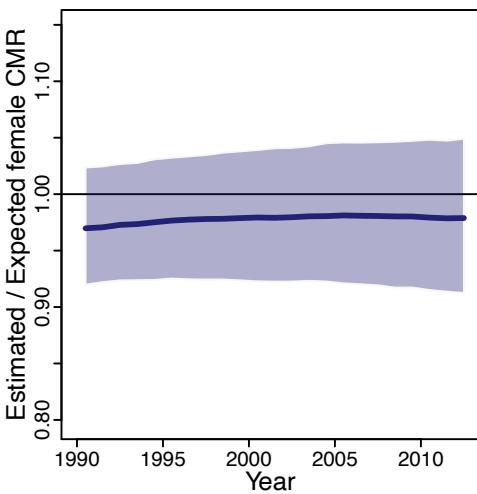
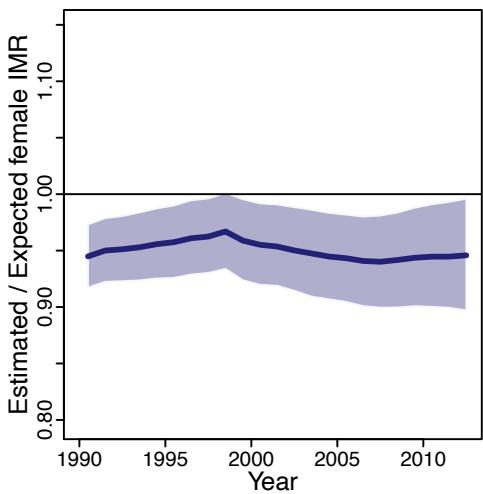
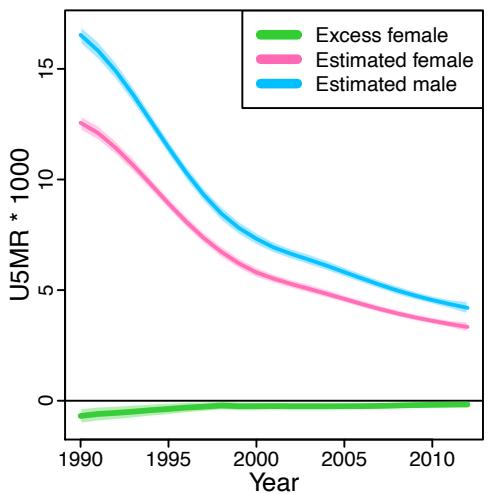
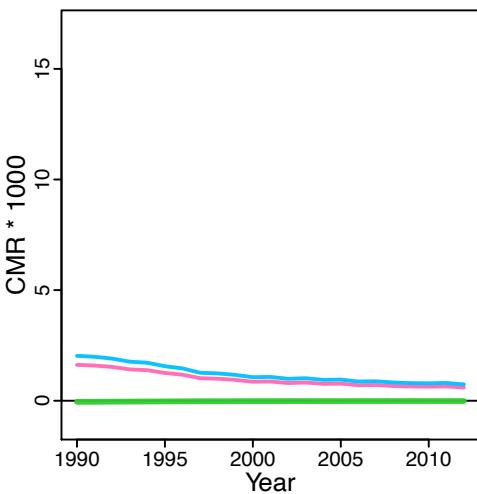
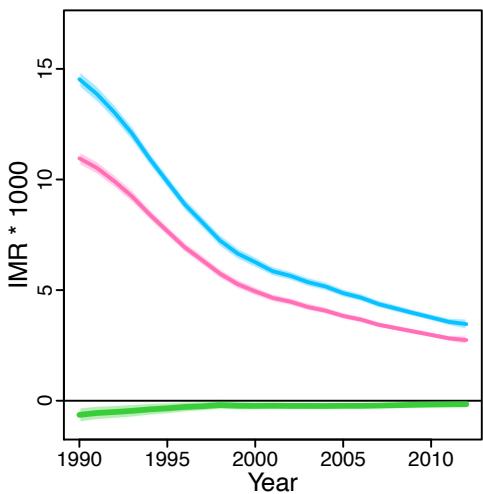
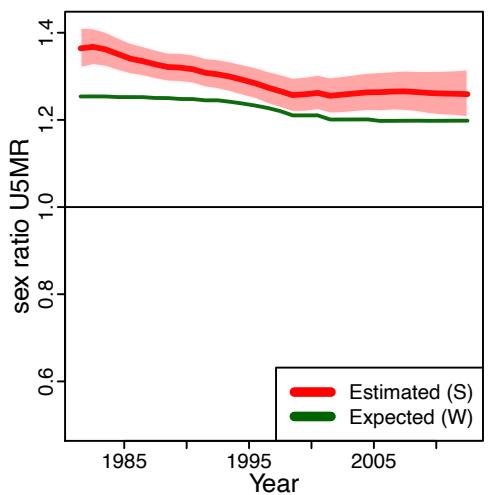
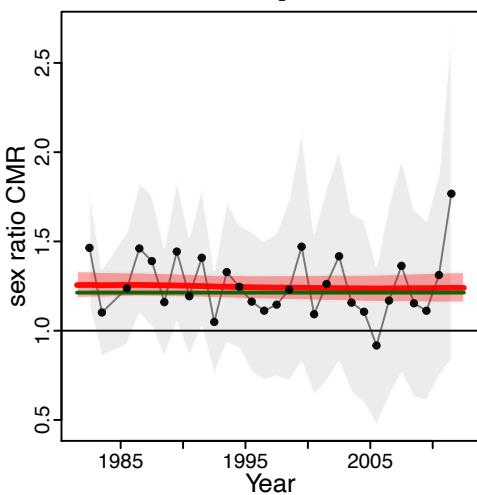
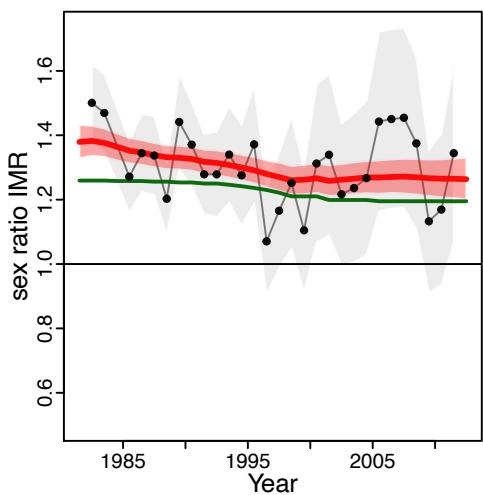
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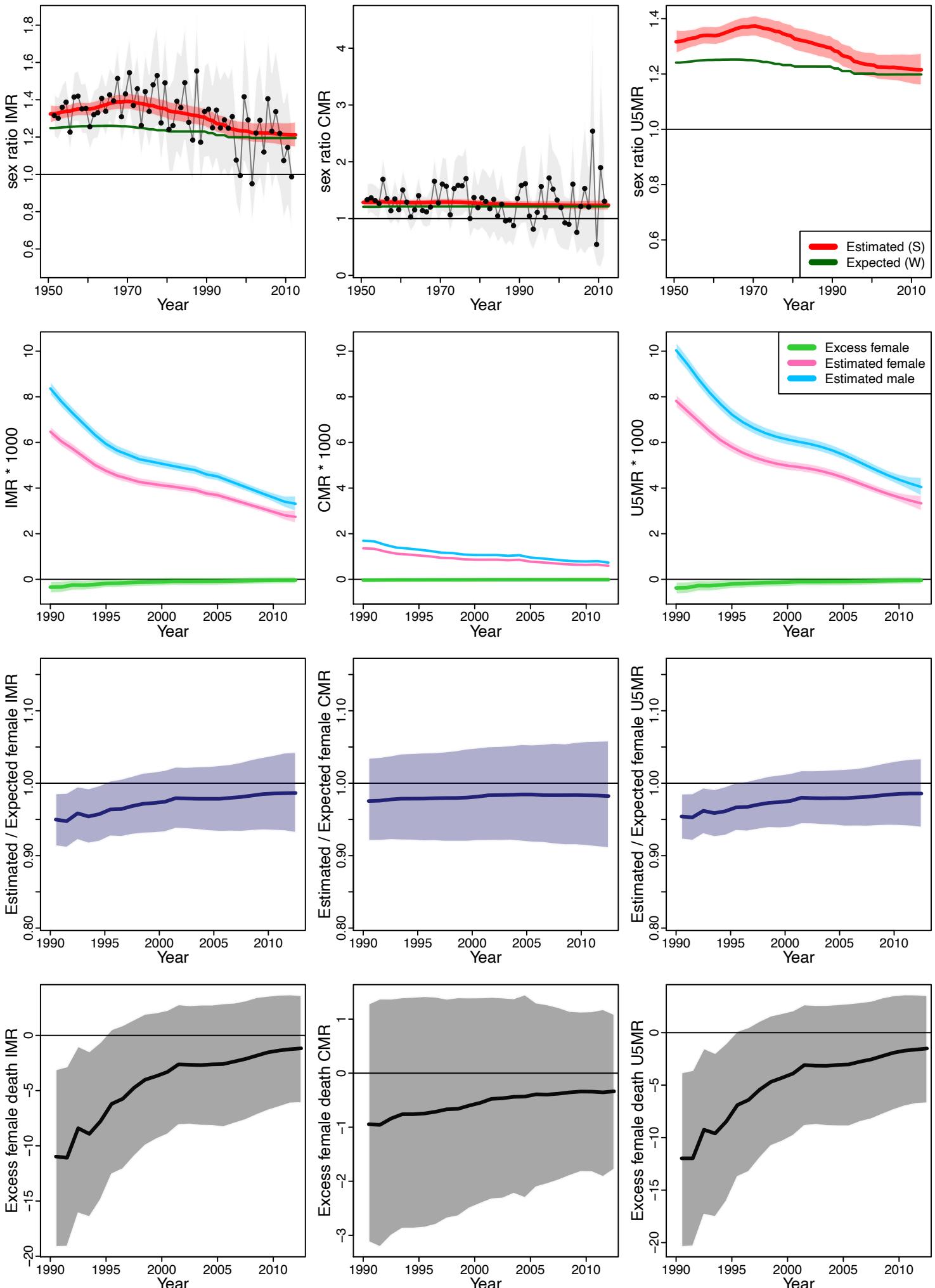
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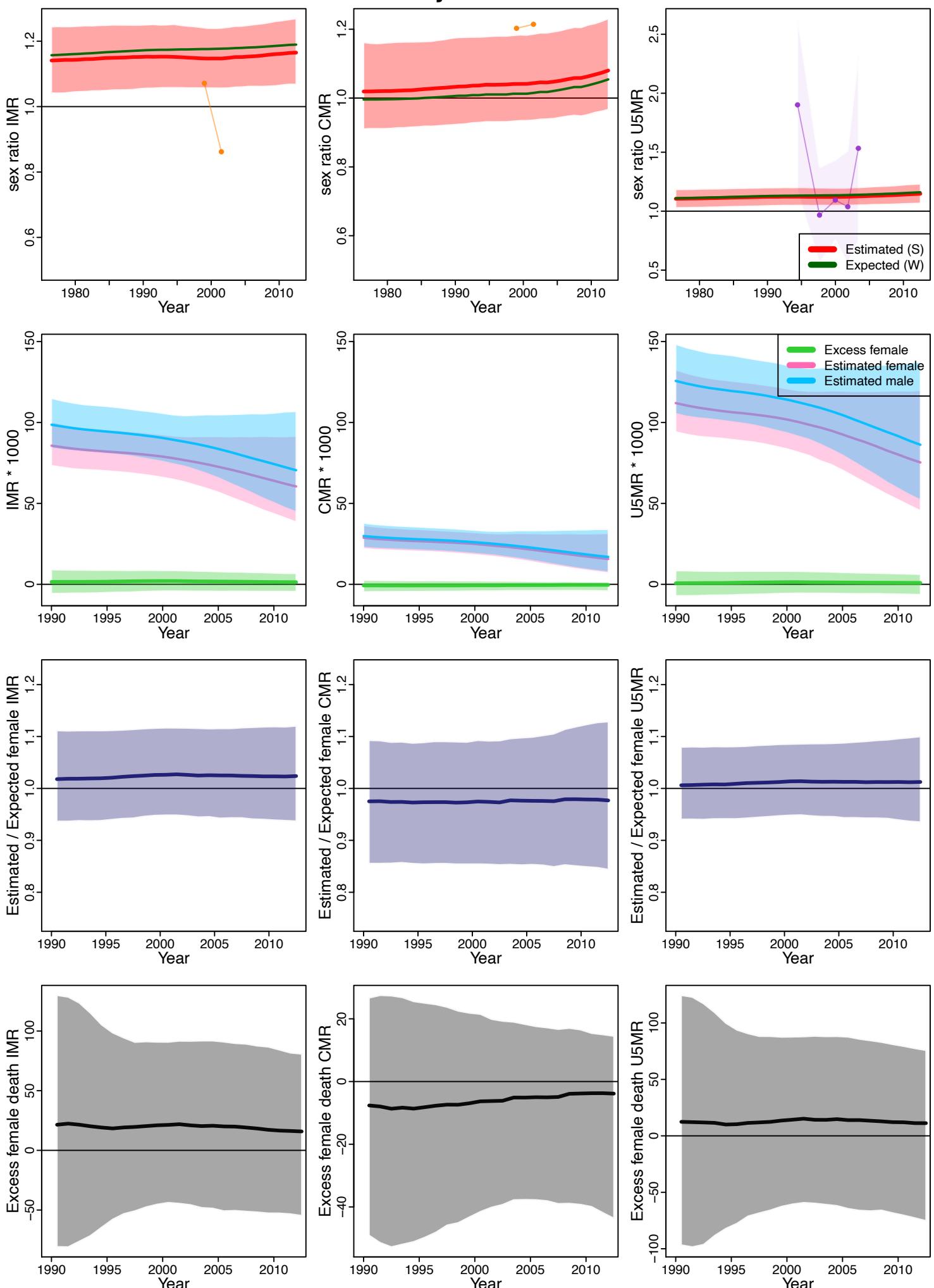
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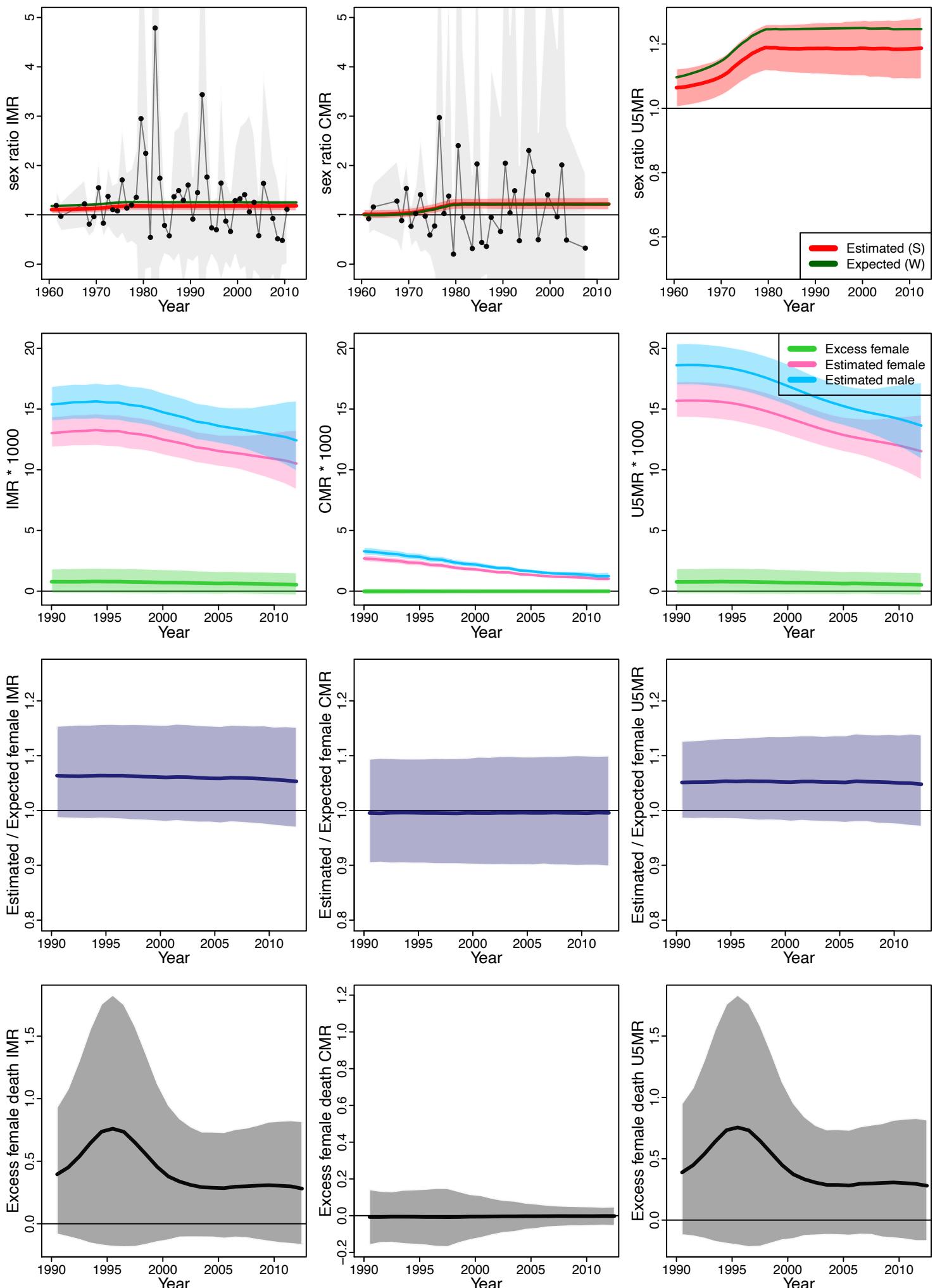
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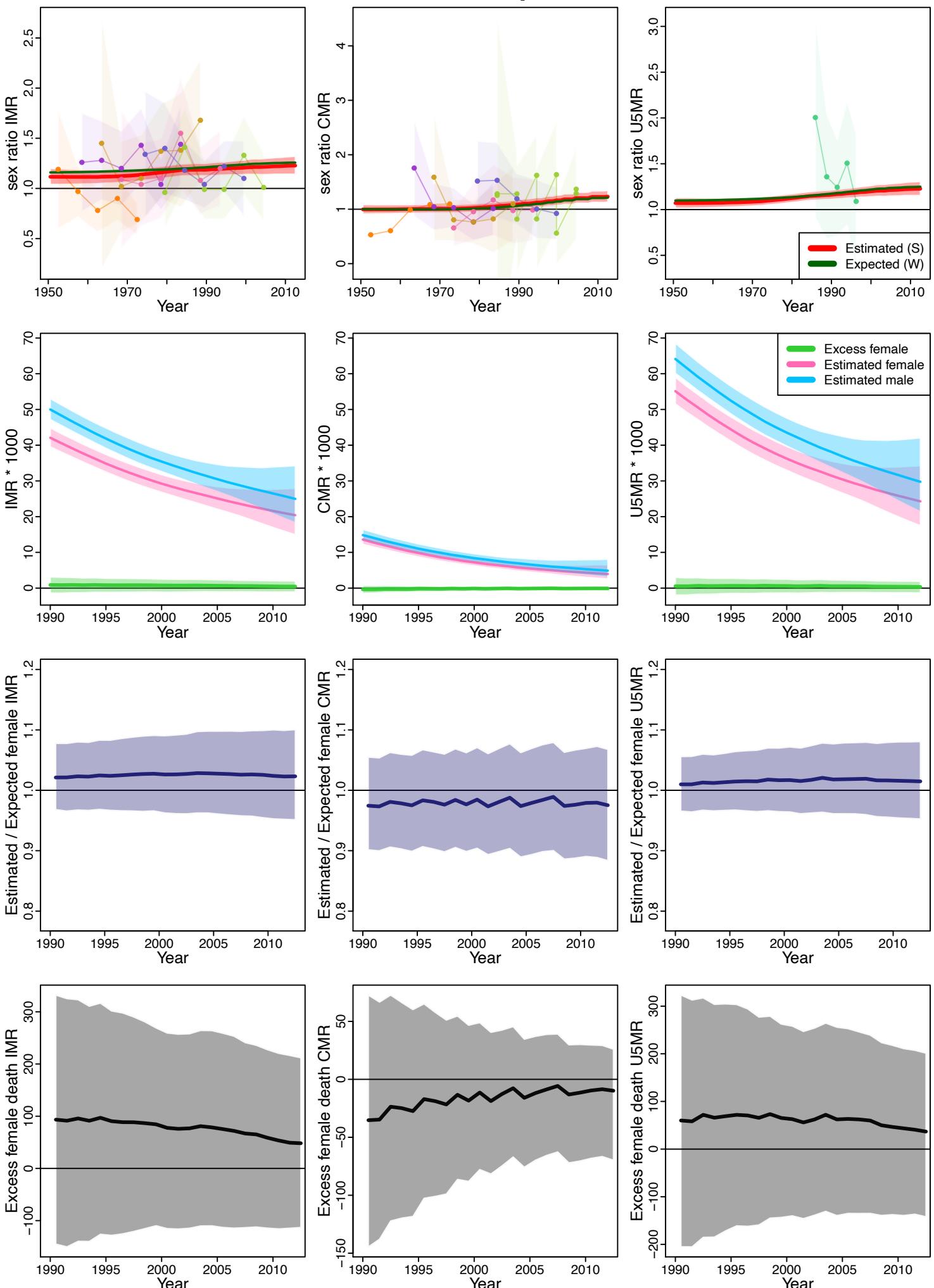
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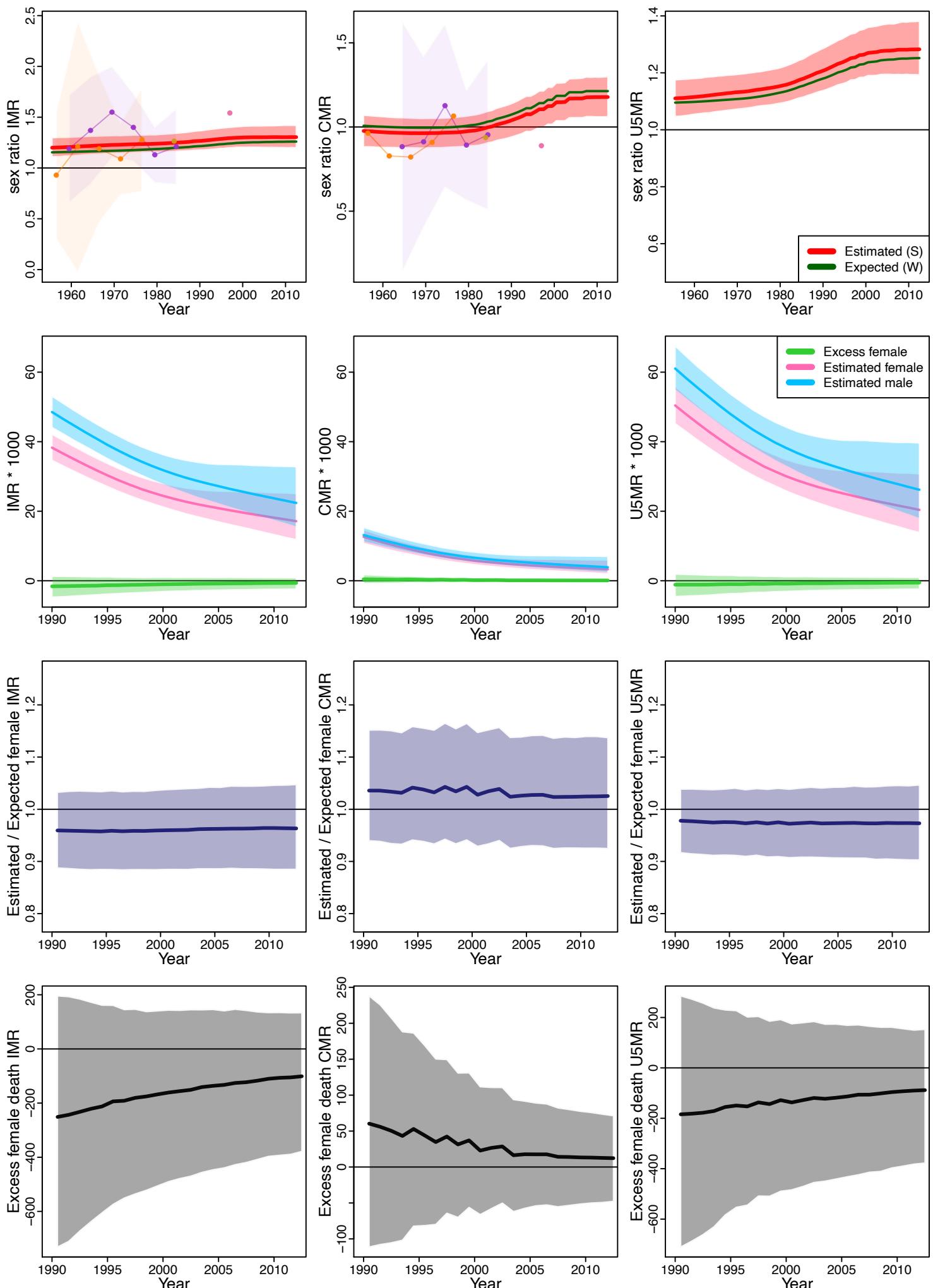
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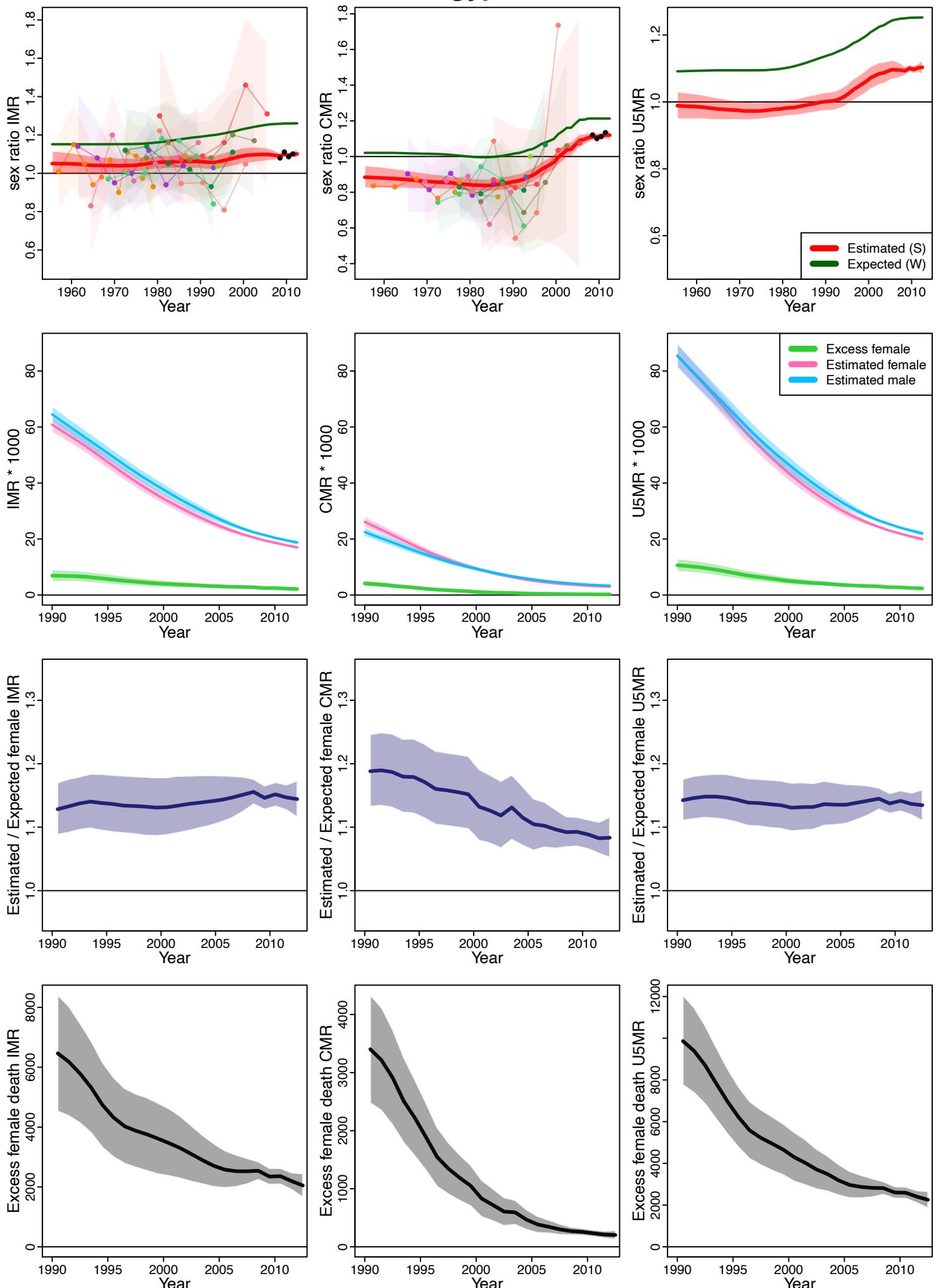
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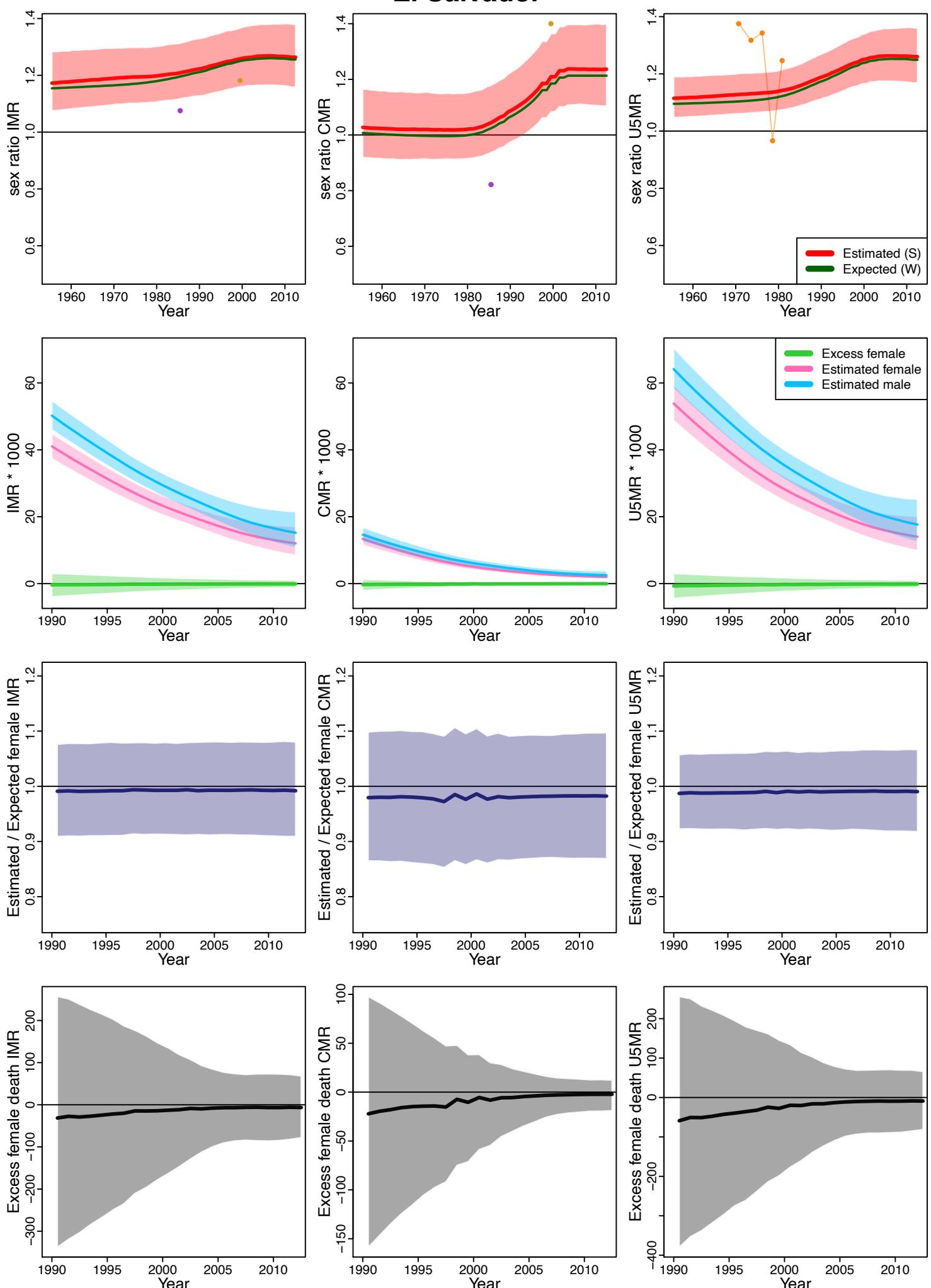
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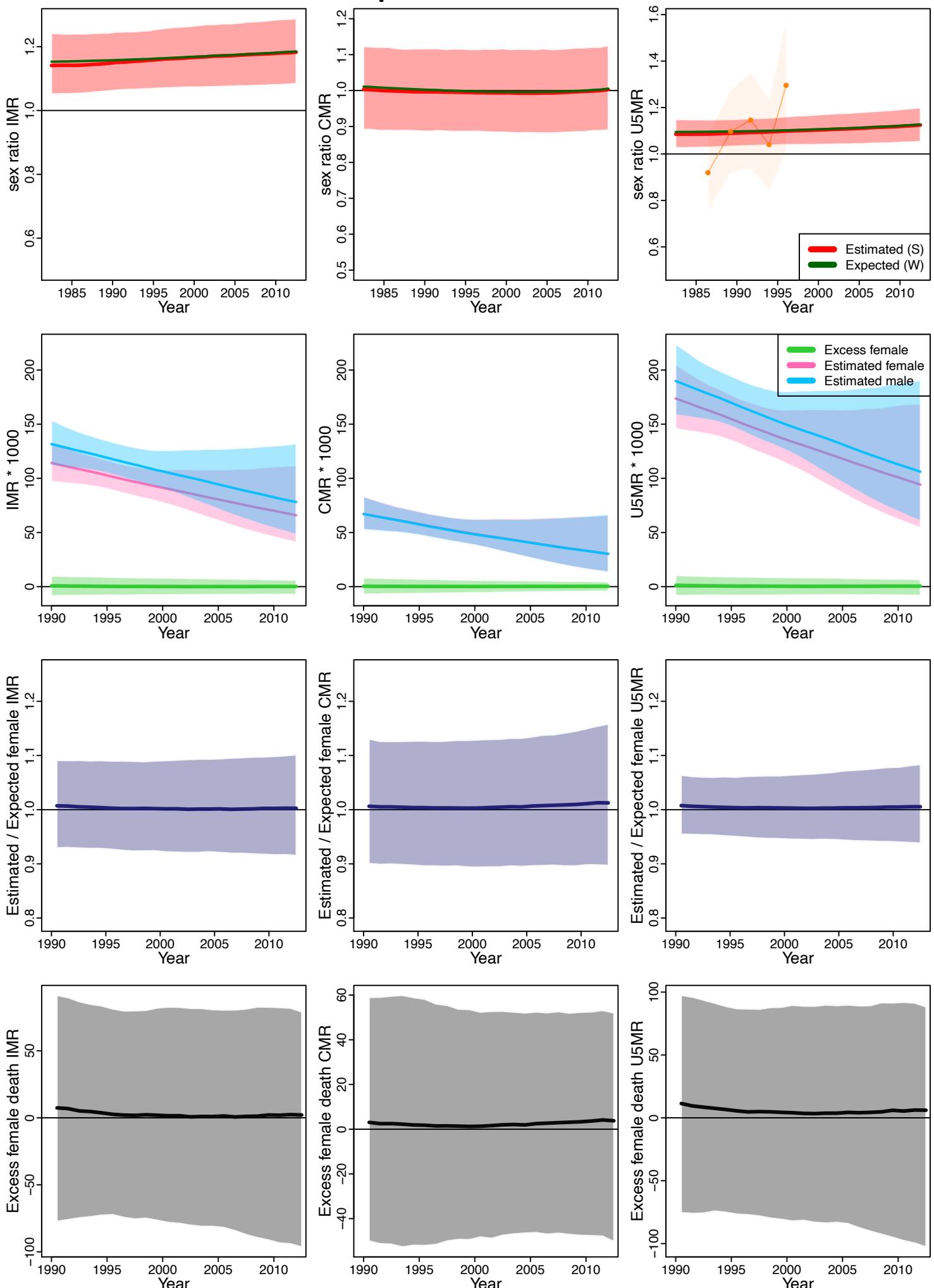
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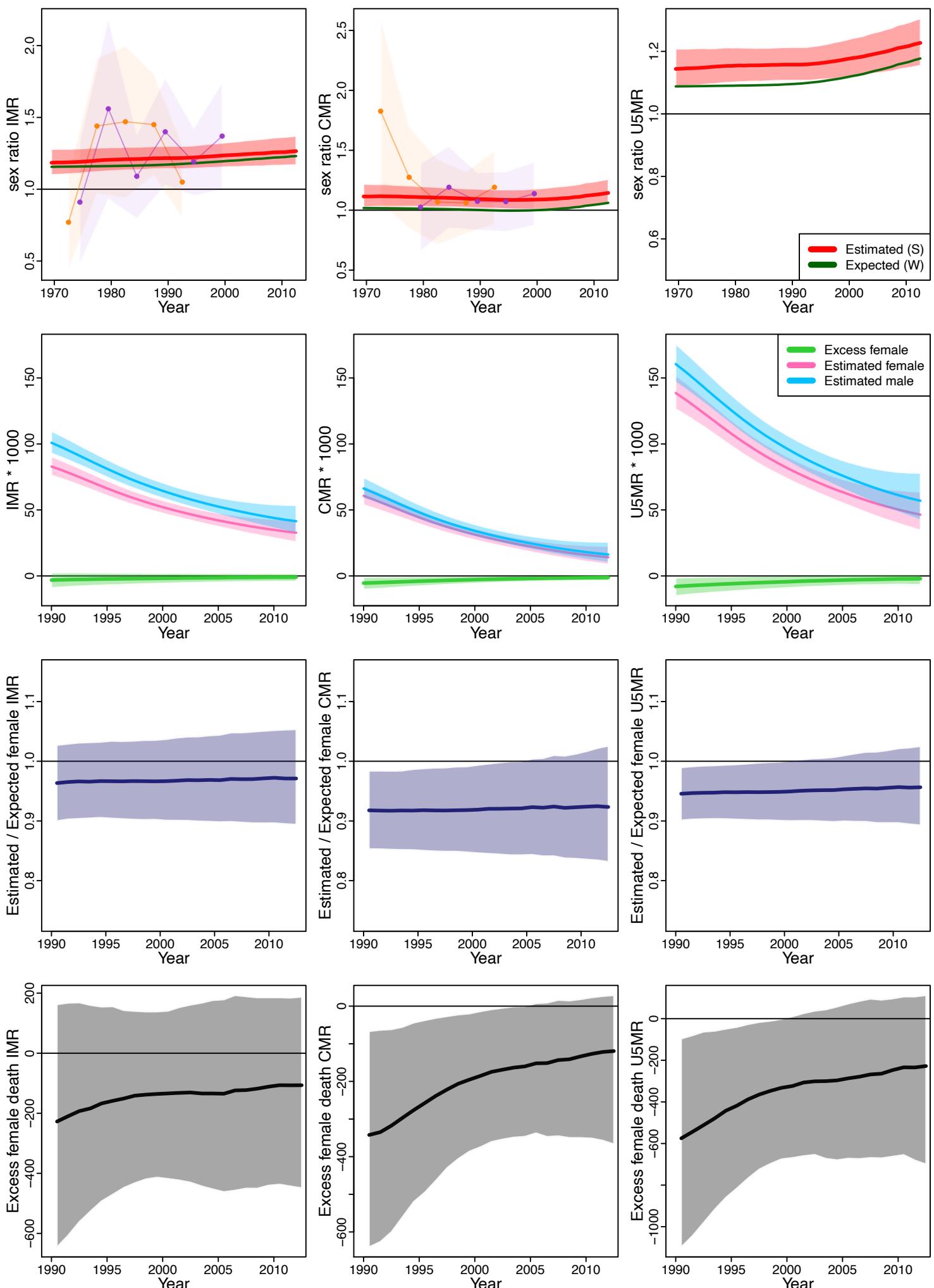
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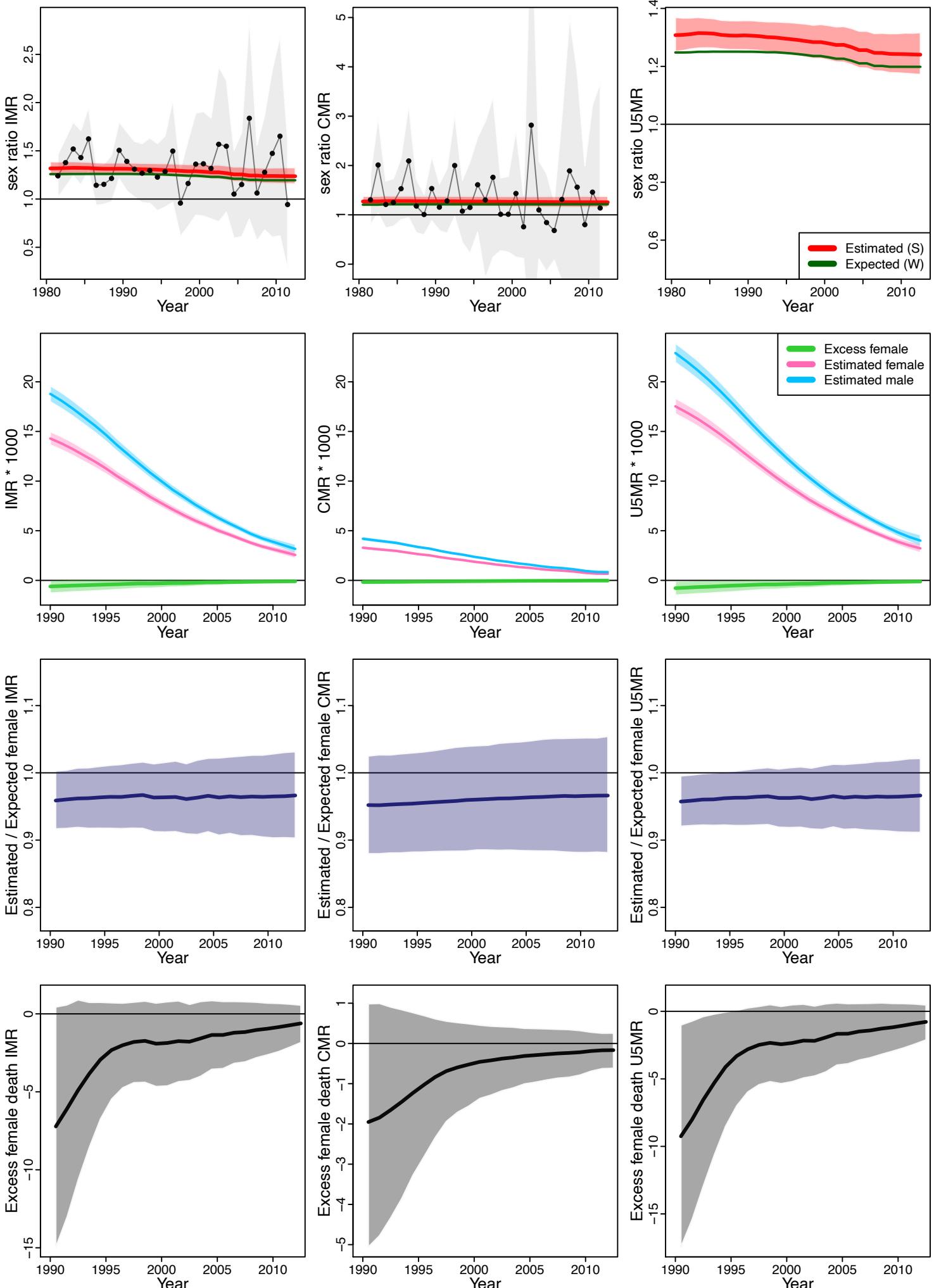
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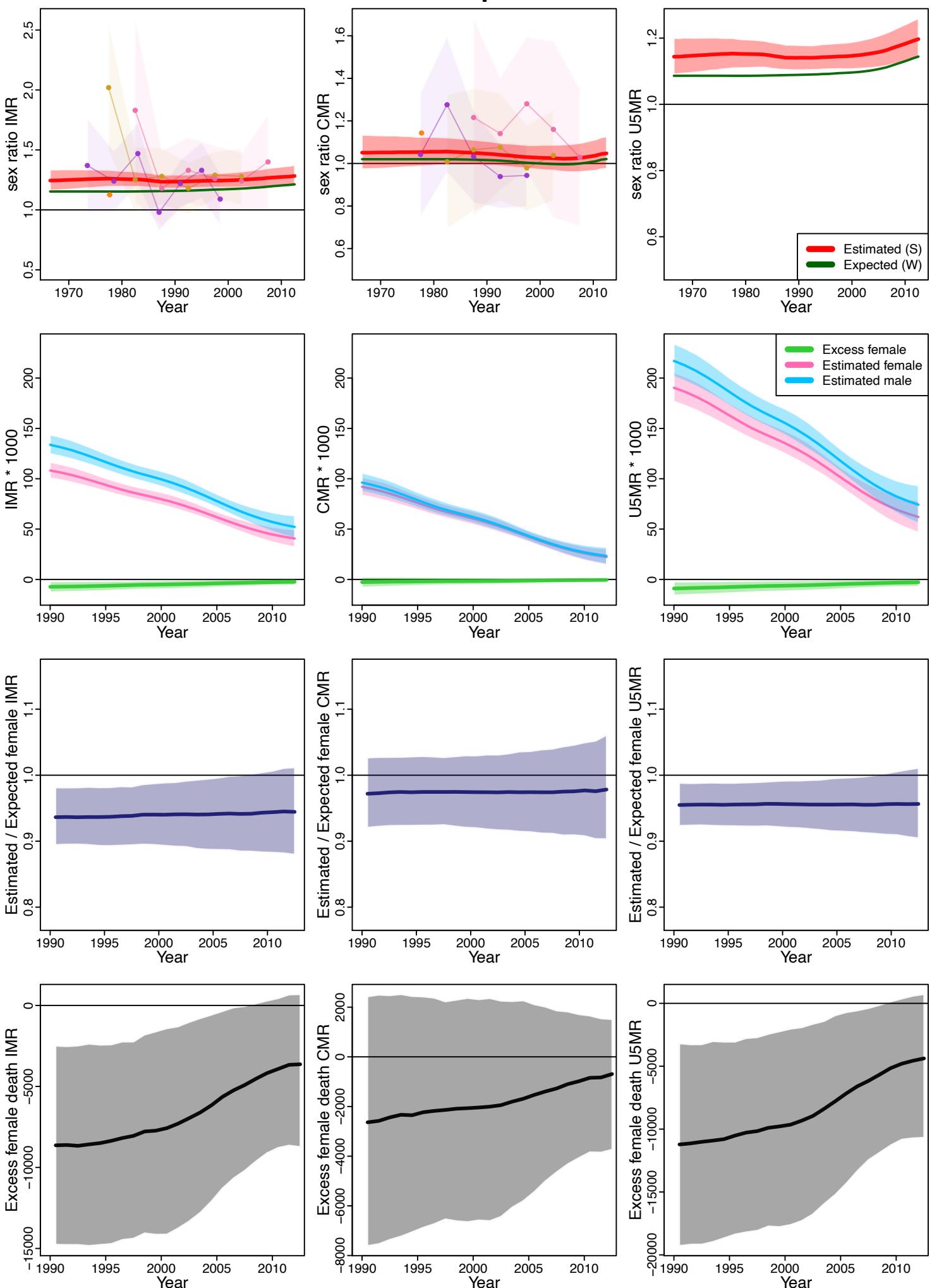
# Eritrea



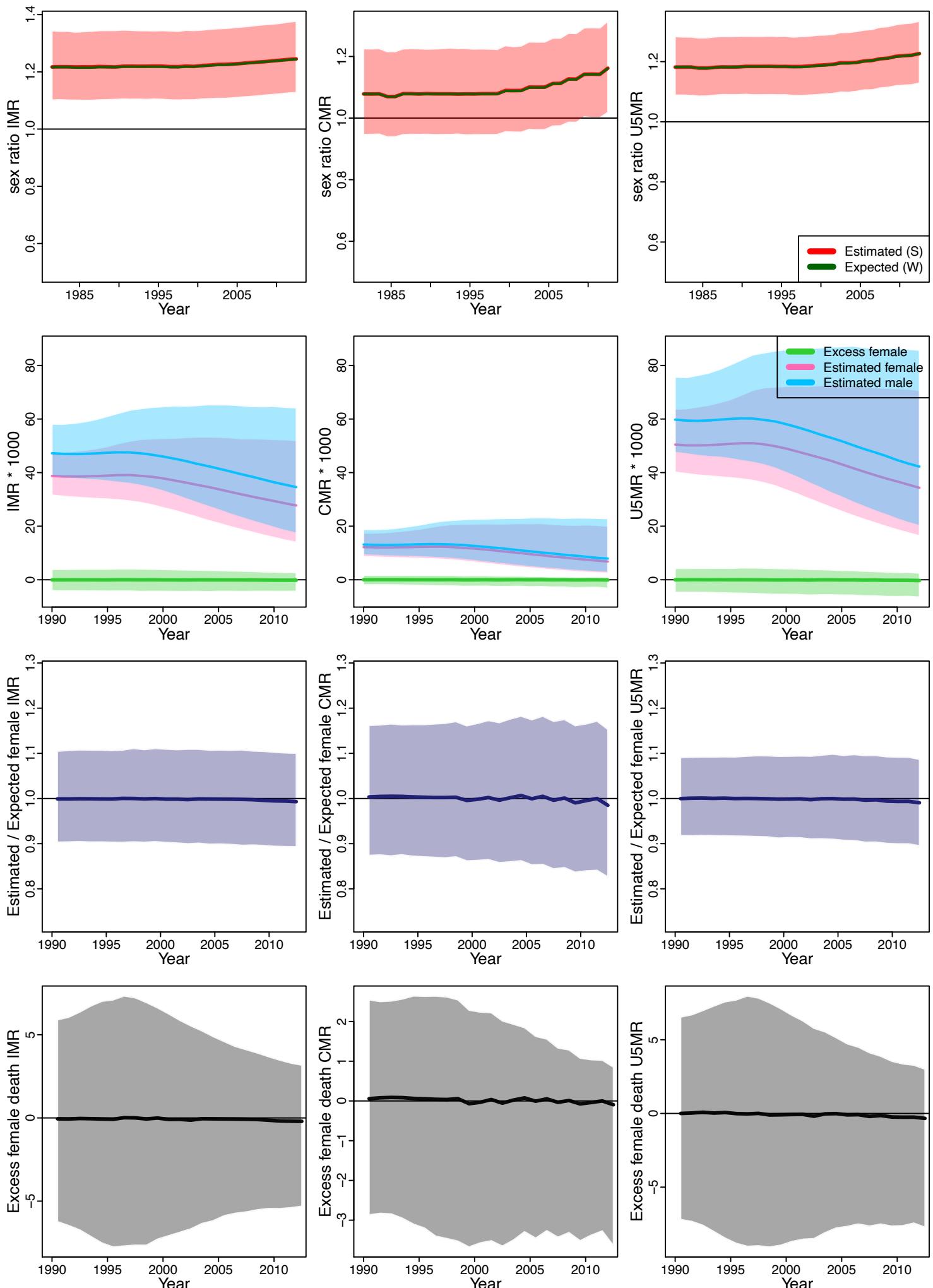
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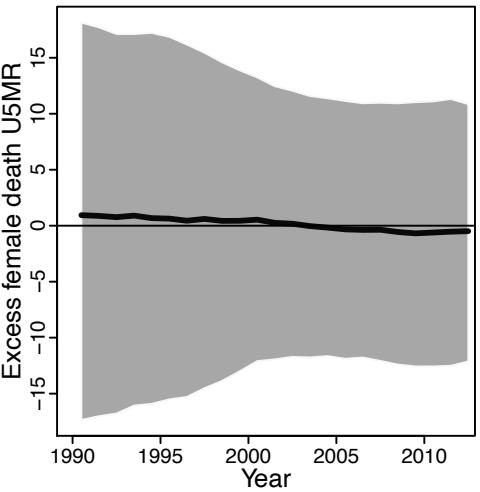
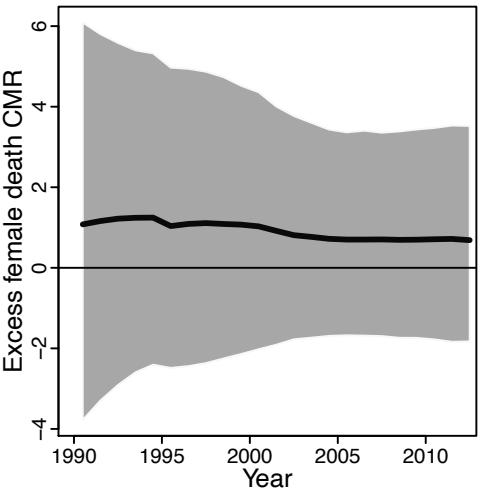
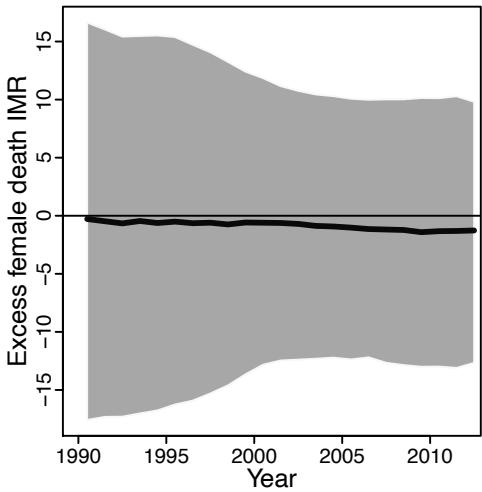
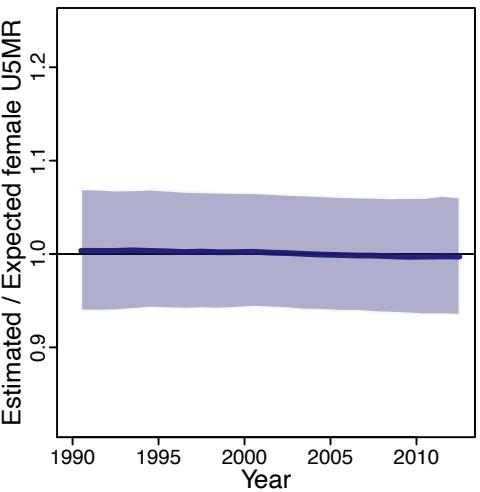
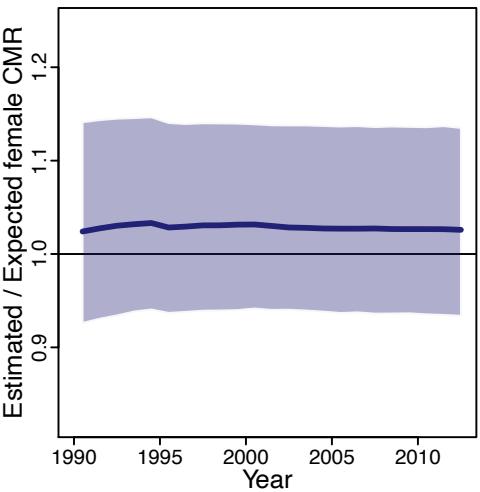
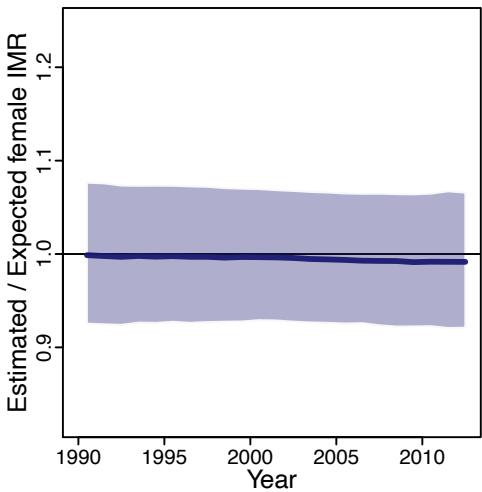
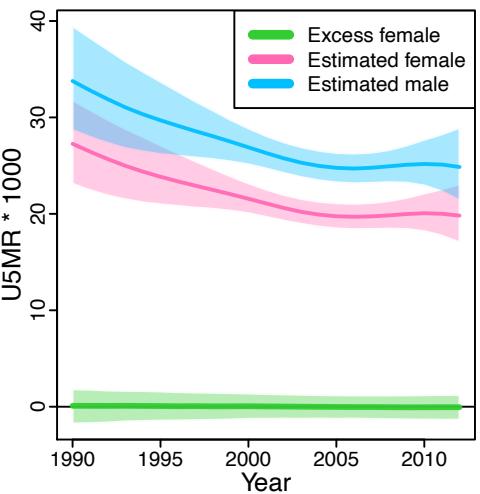
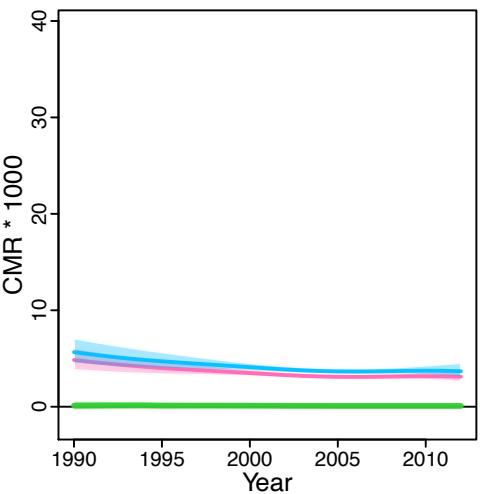
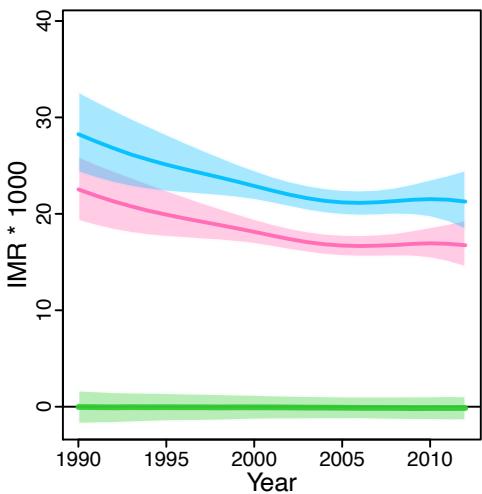
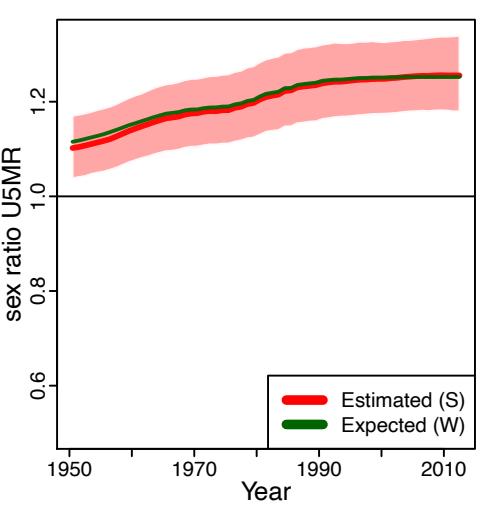
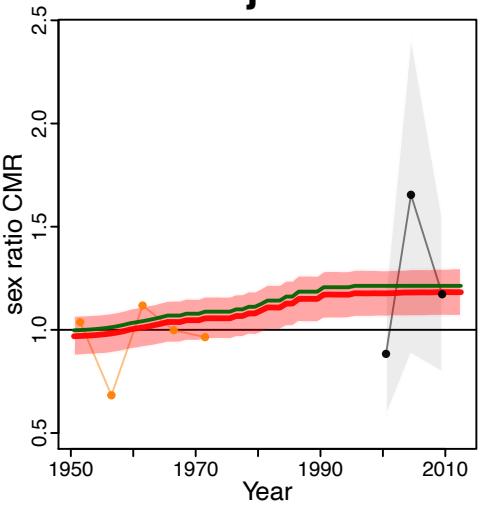
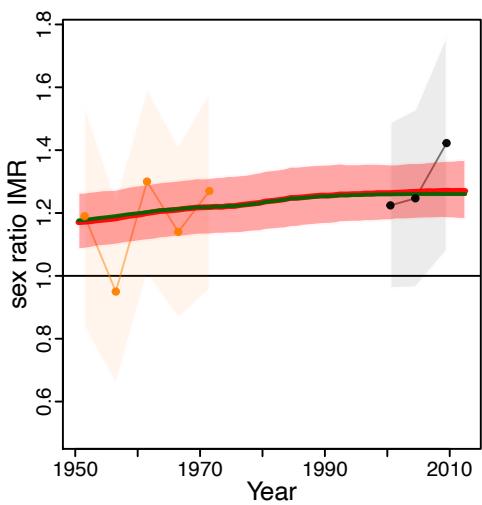
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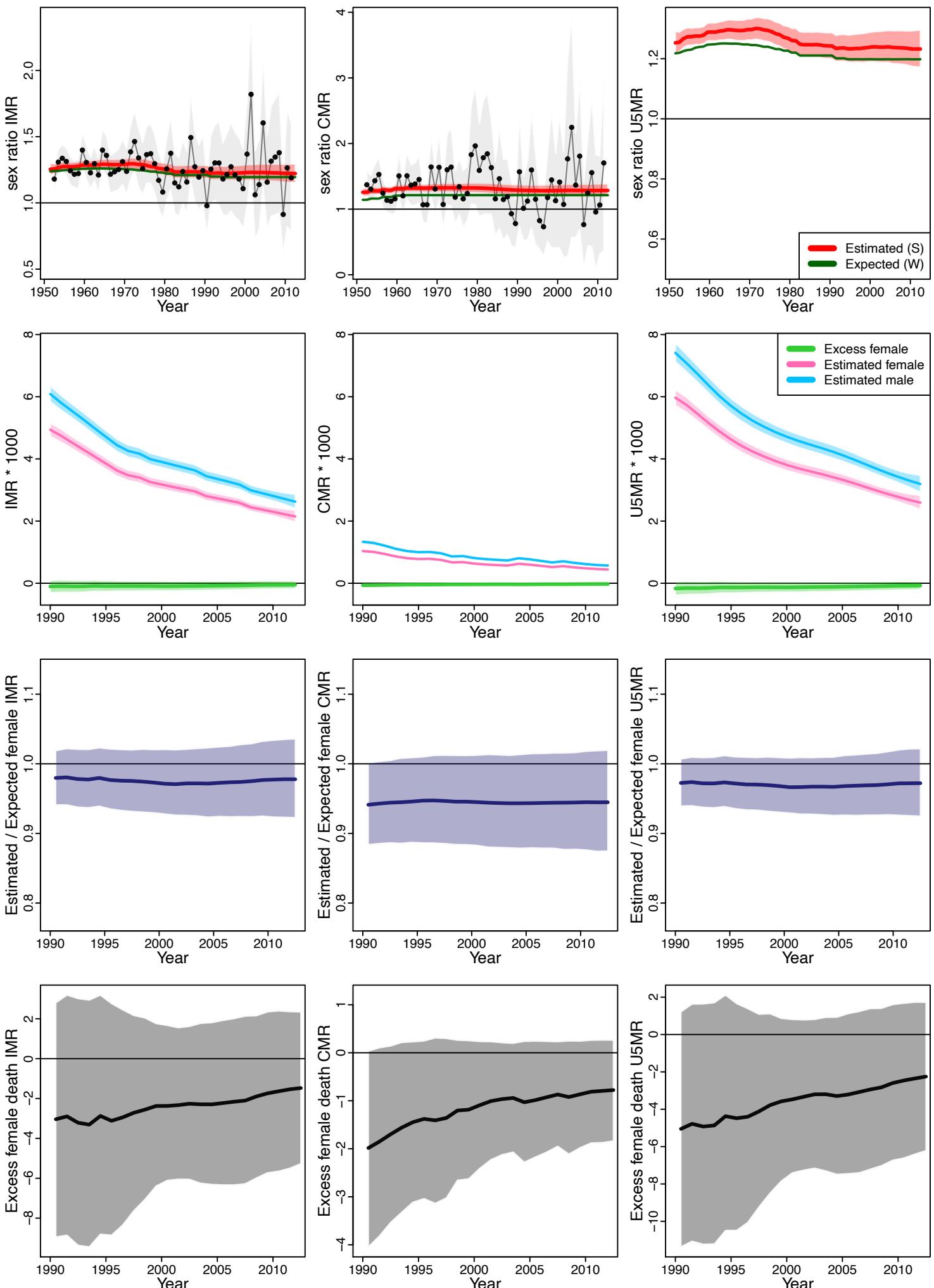
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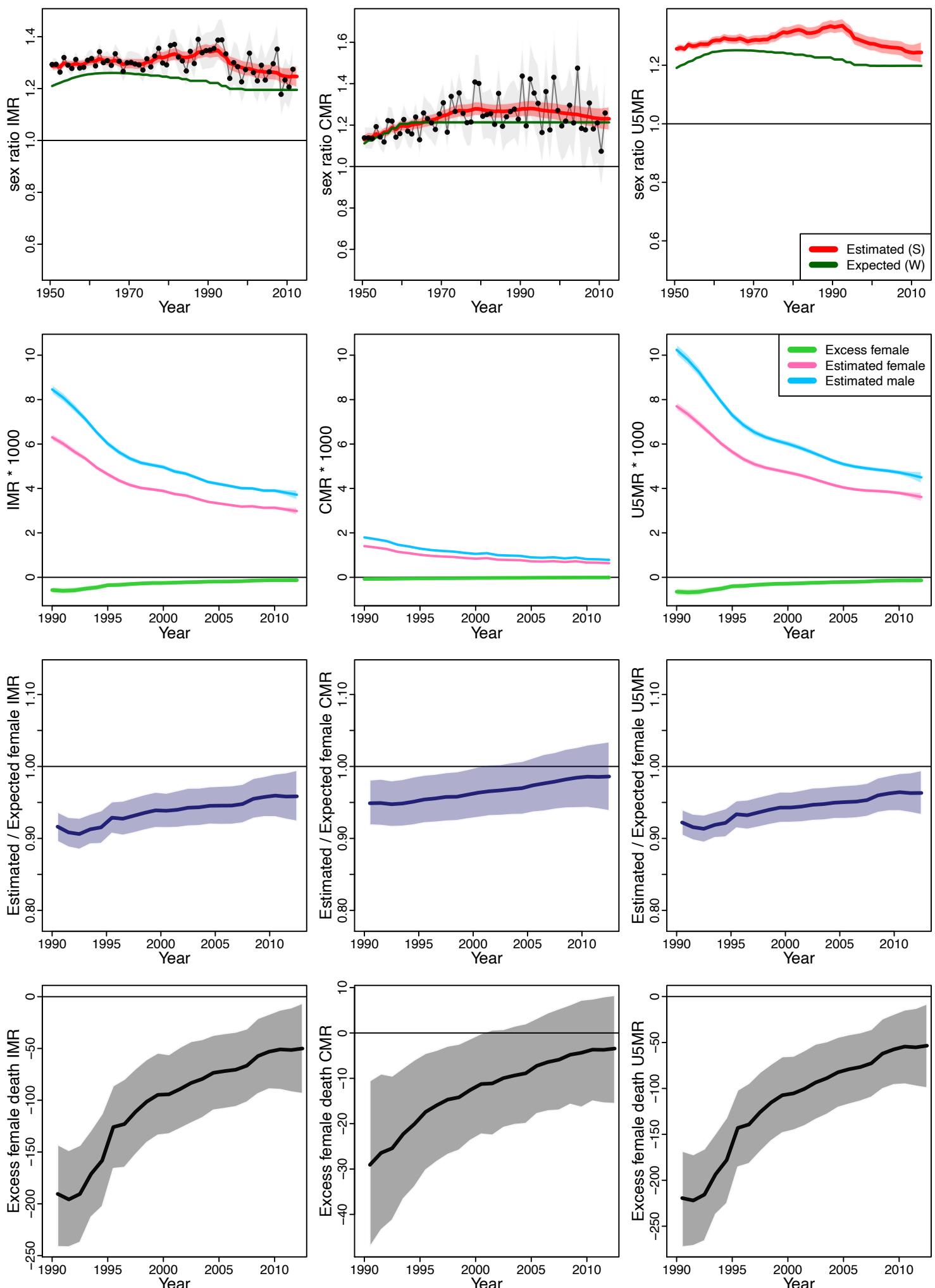
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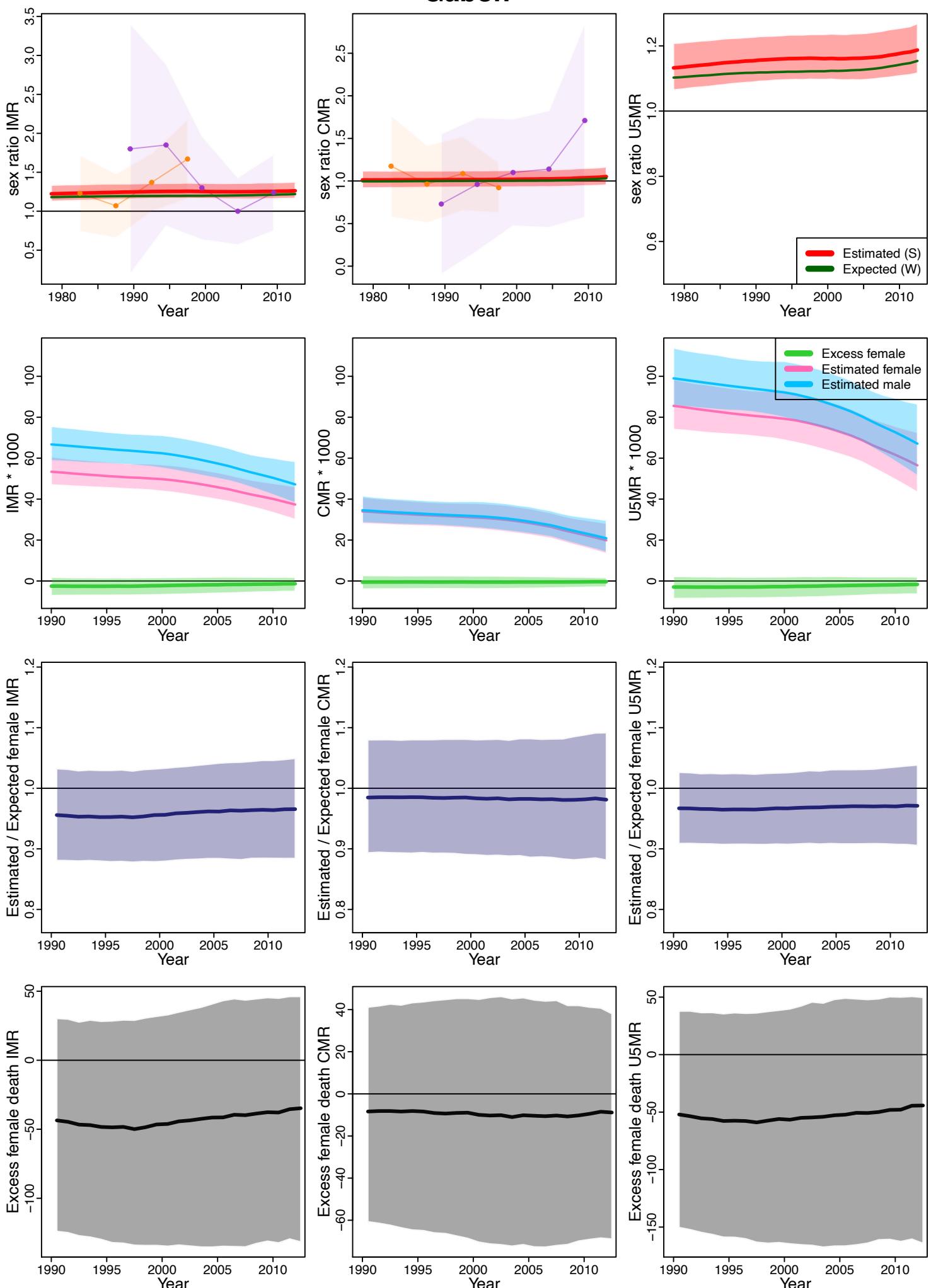
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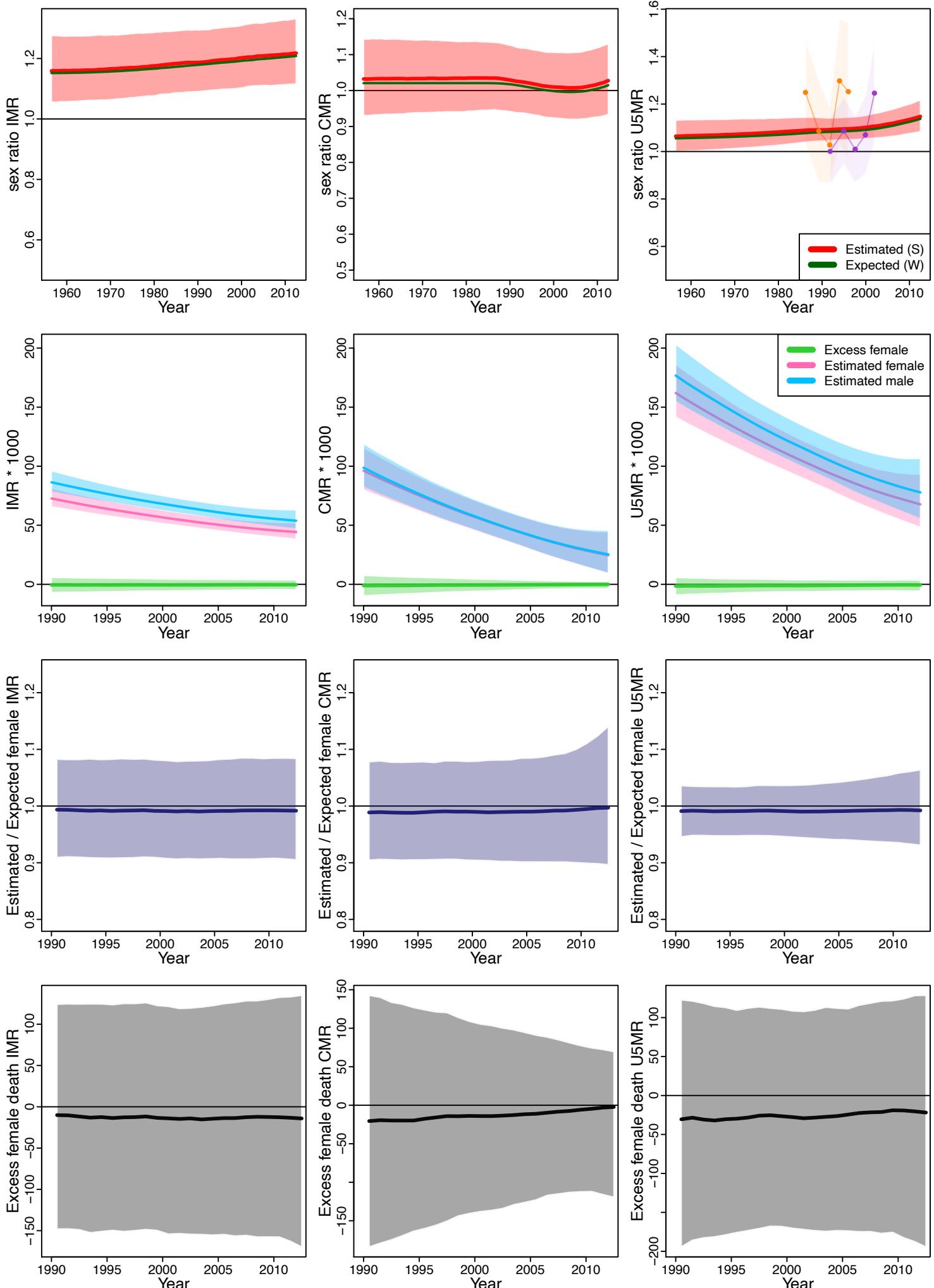
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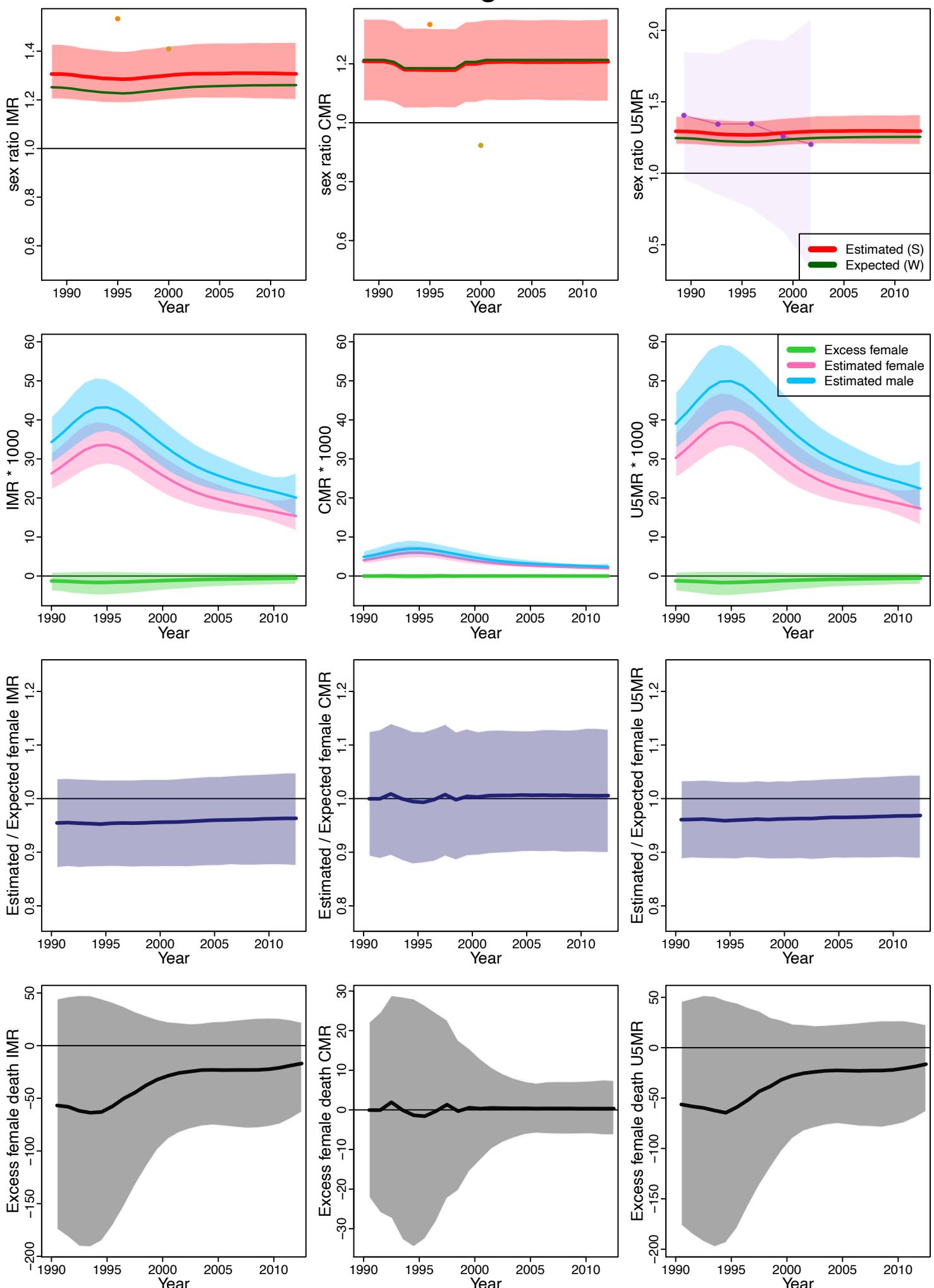
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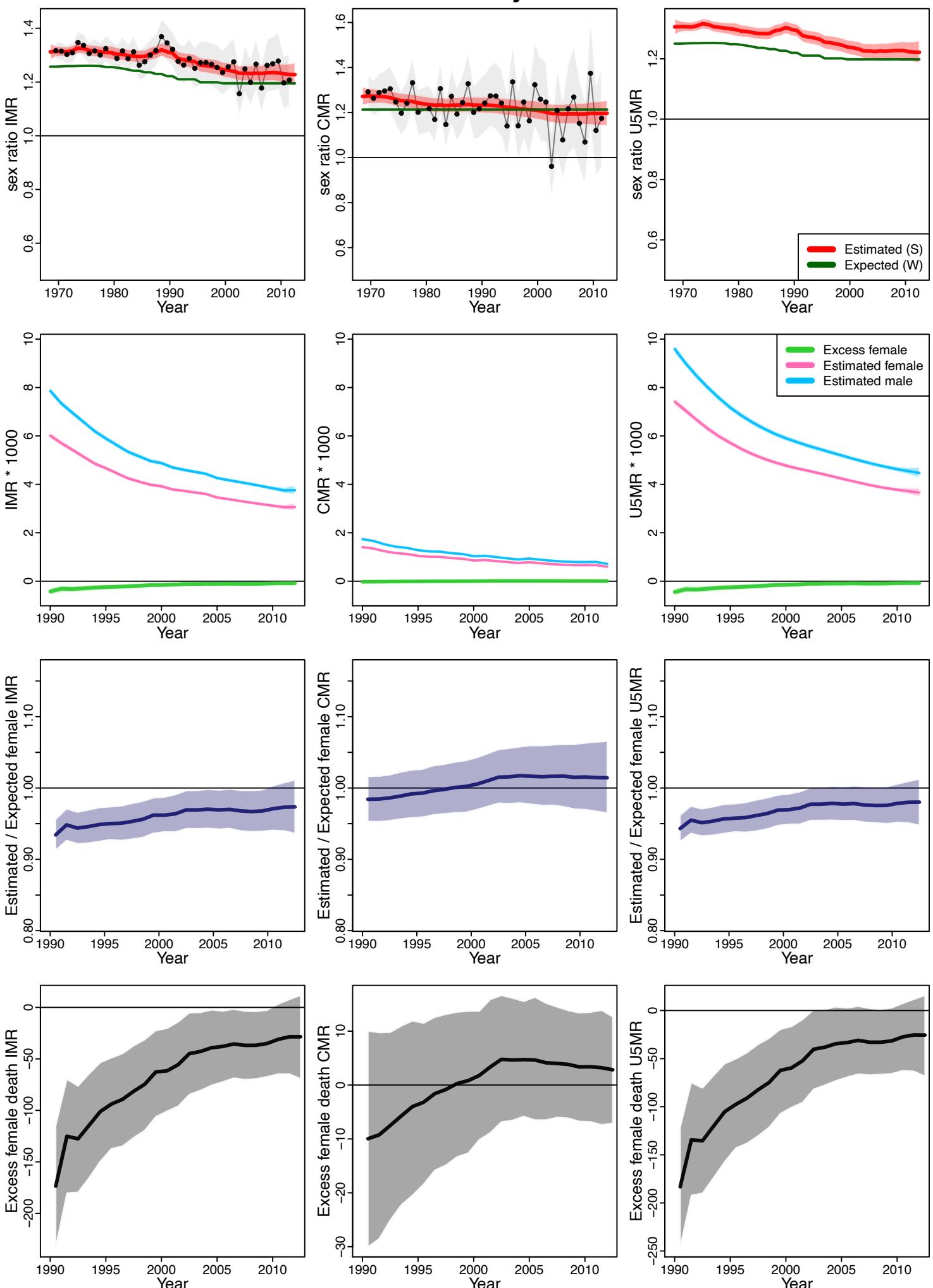
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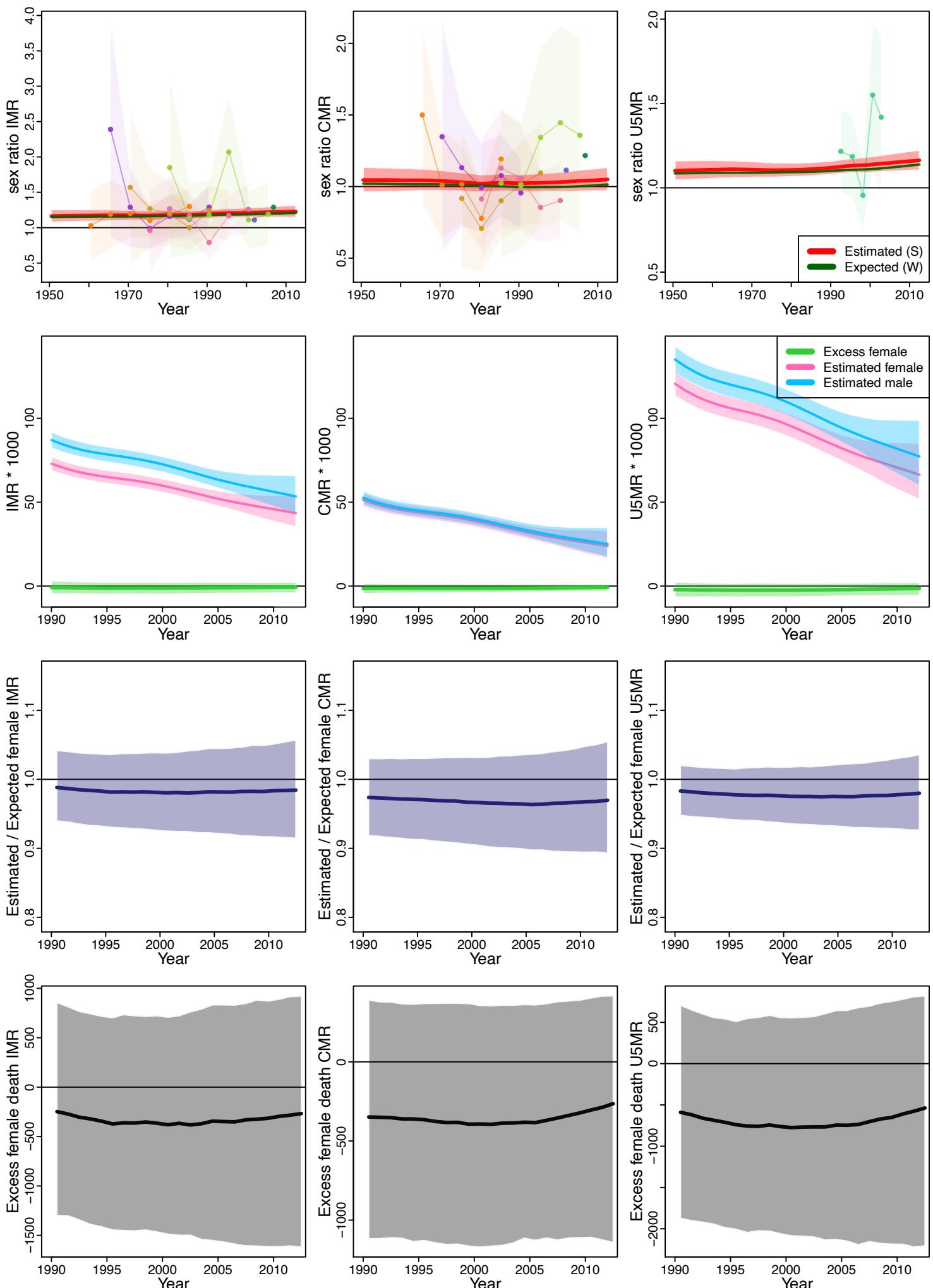
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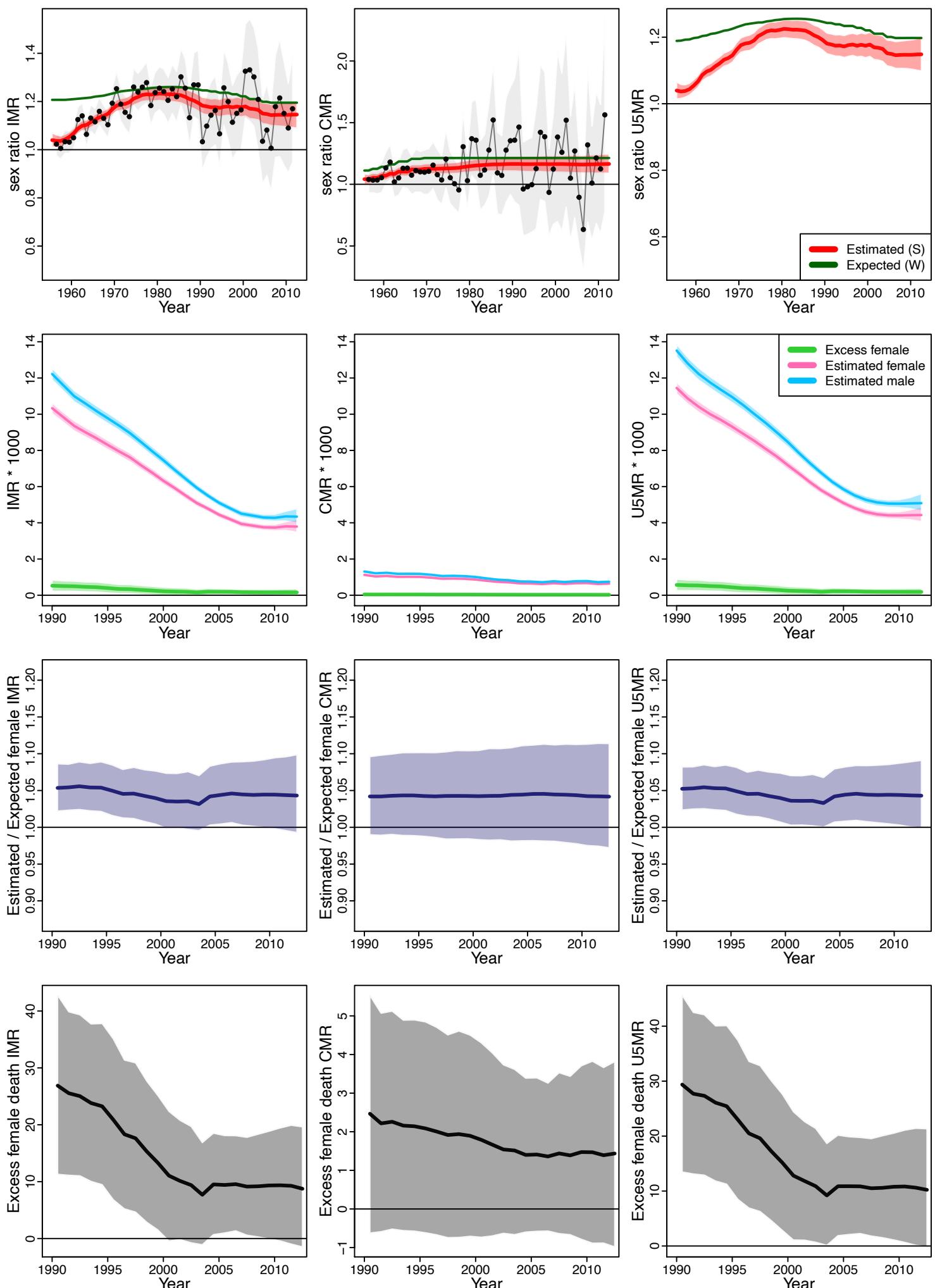
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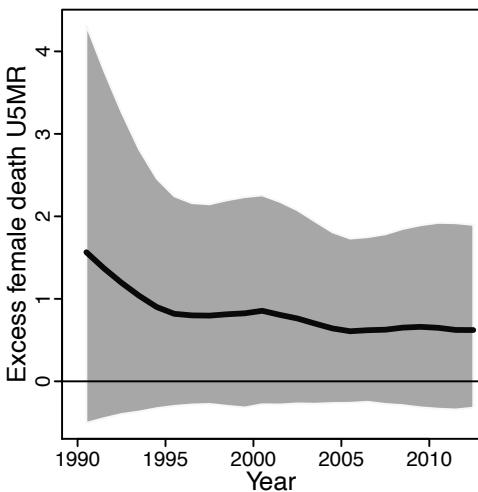
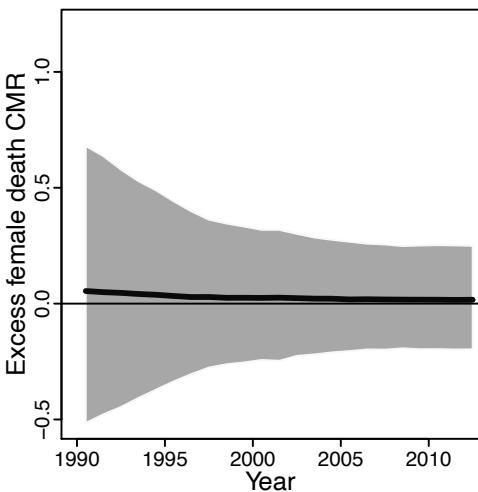
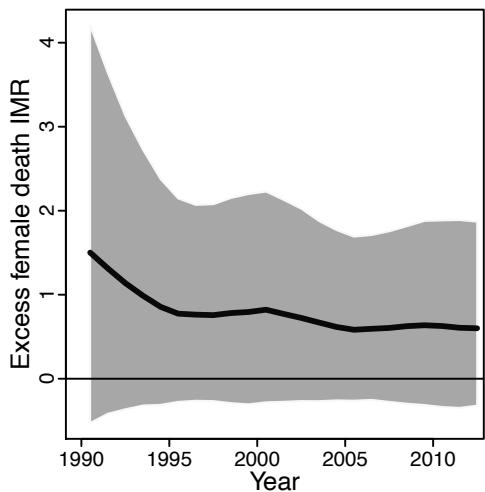
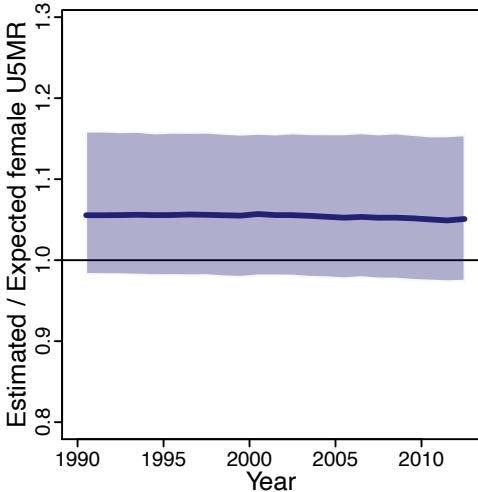
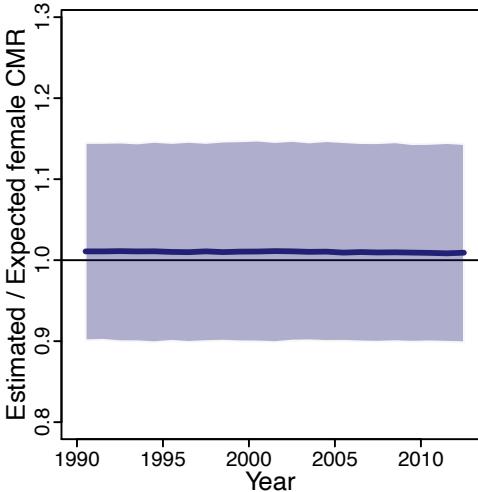
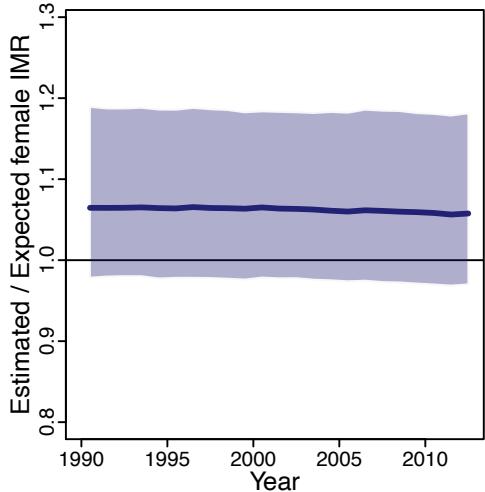
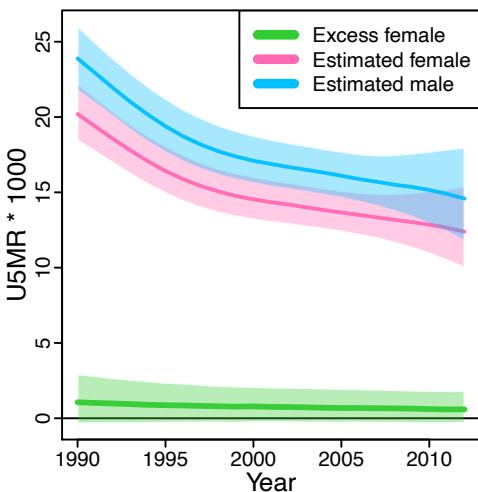
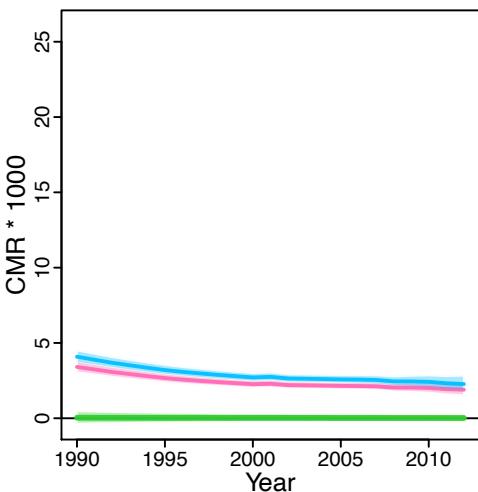
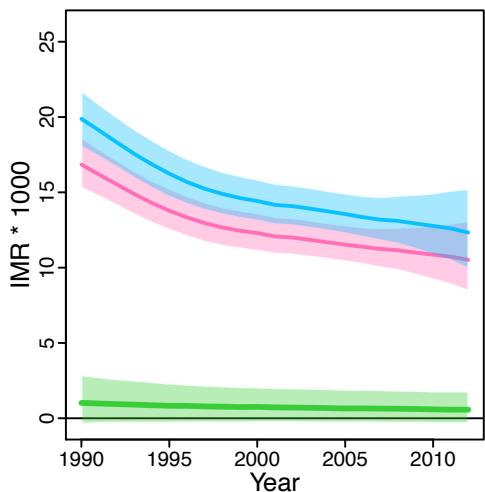
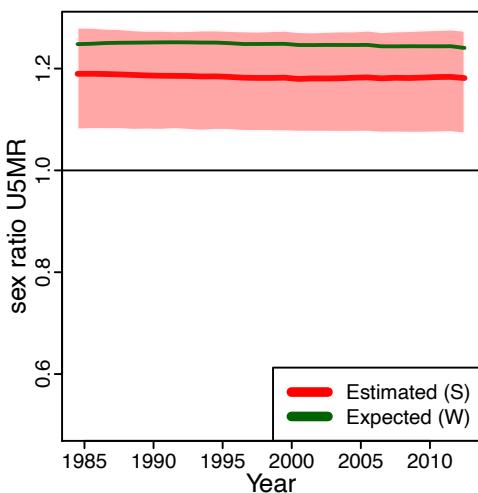
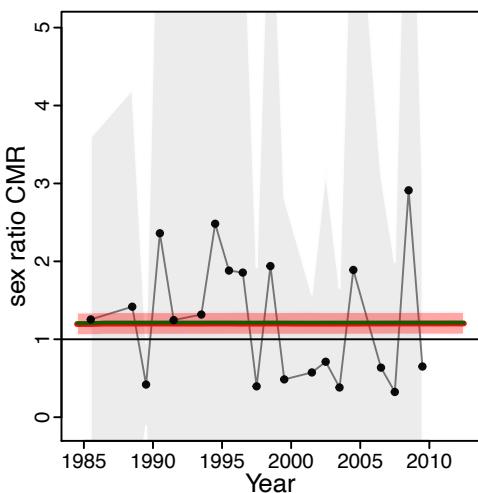
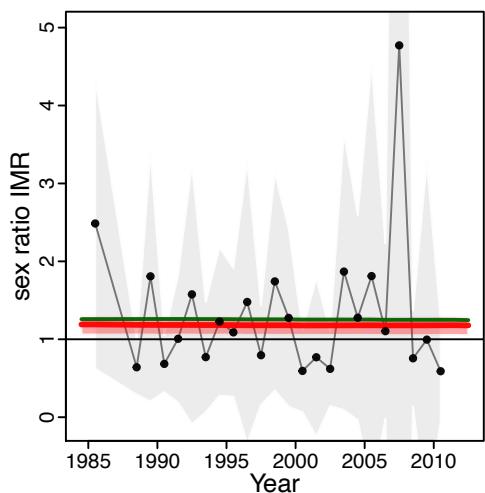
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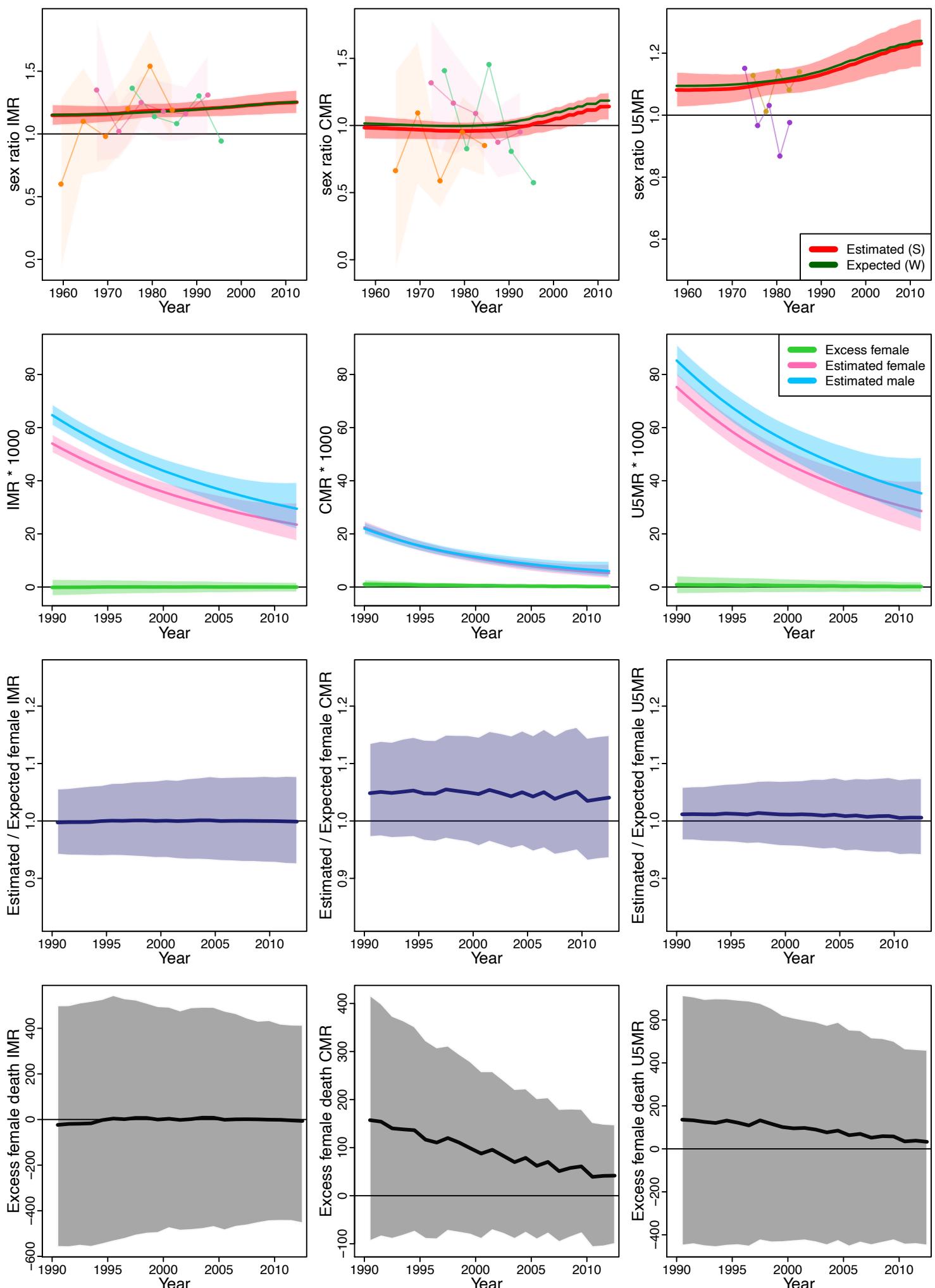
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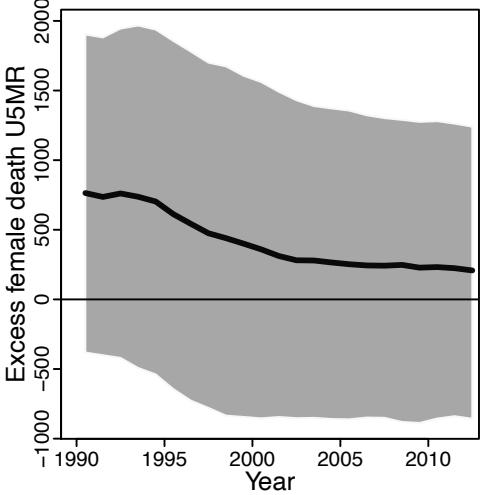
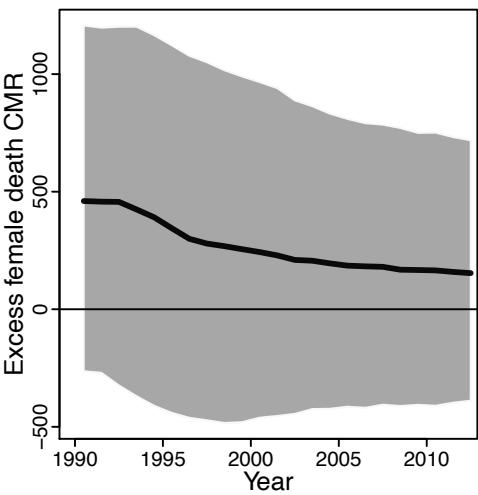
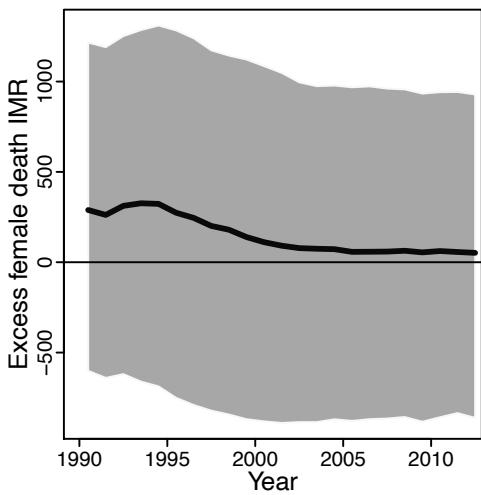
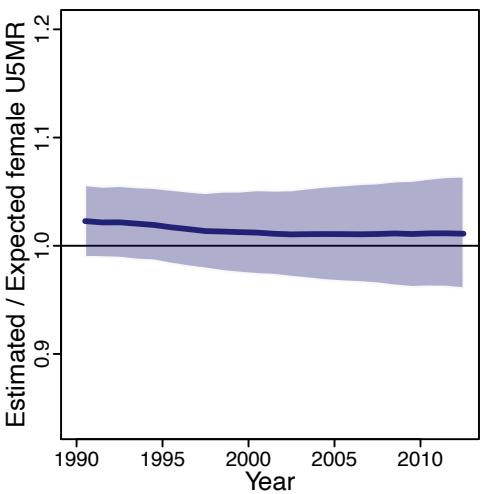
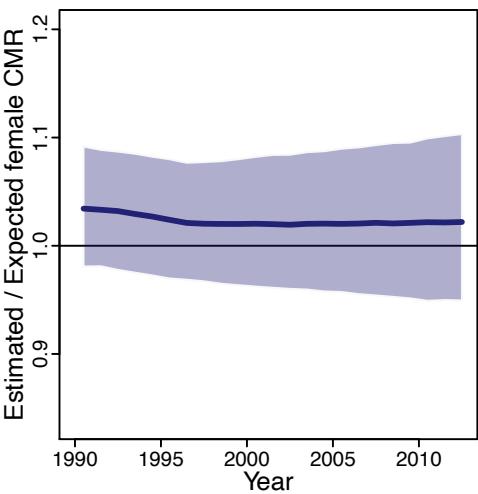
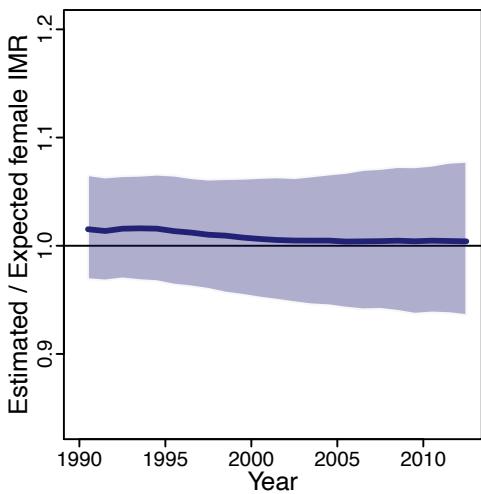
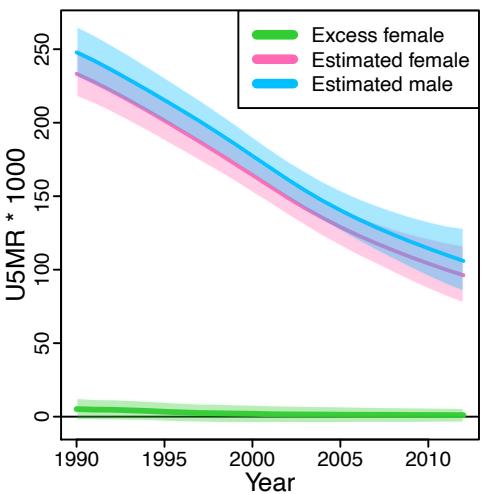
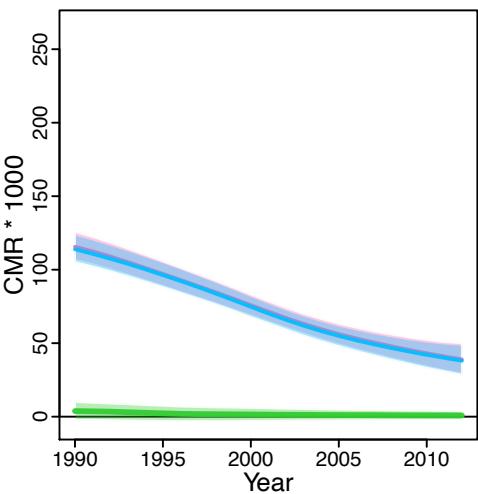
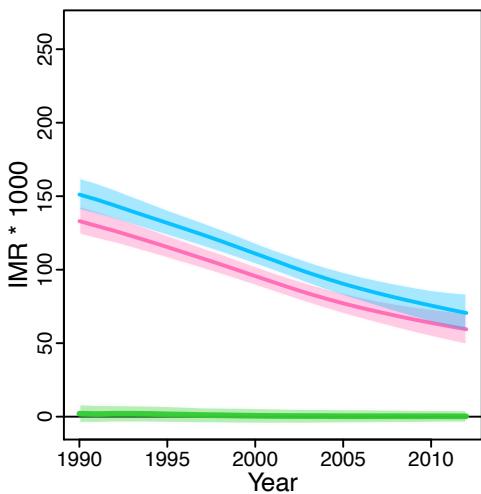
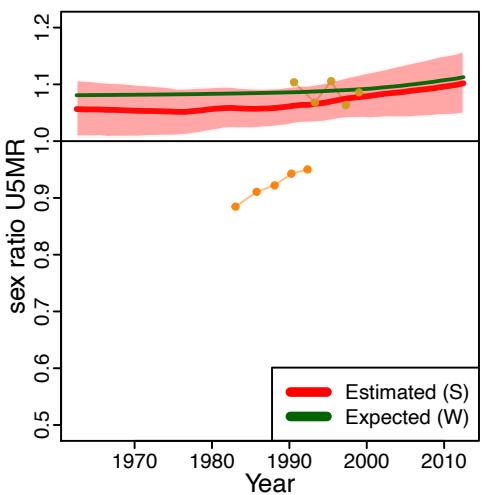
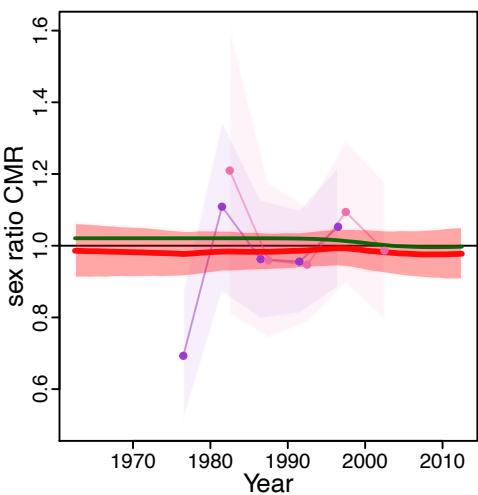
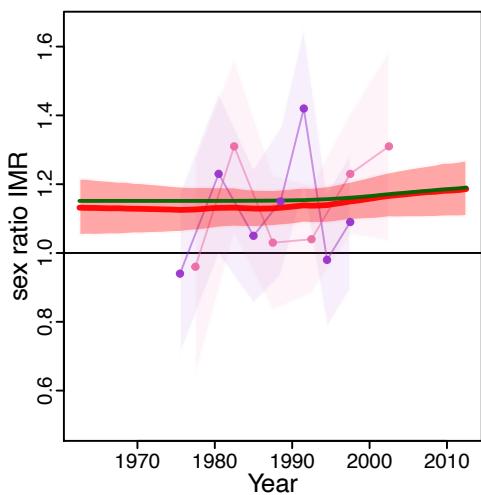
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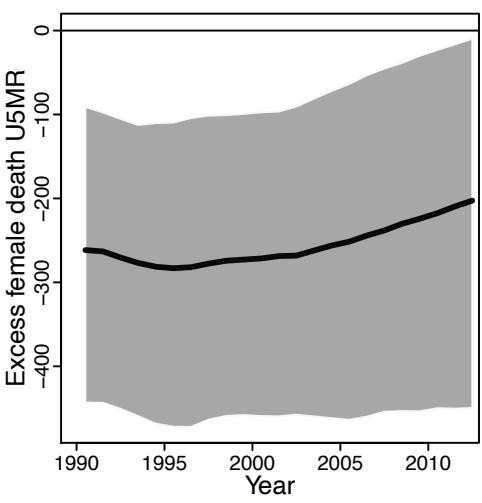
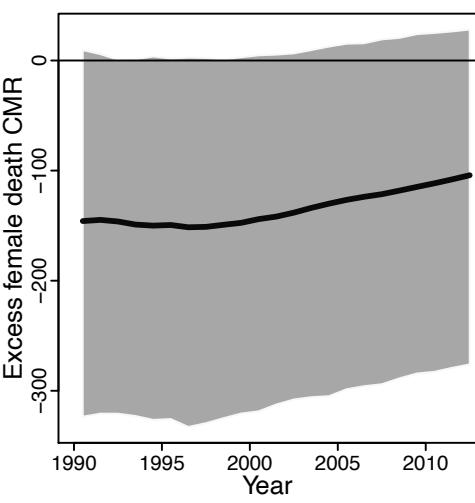
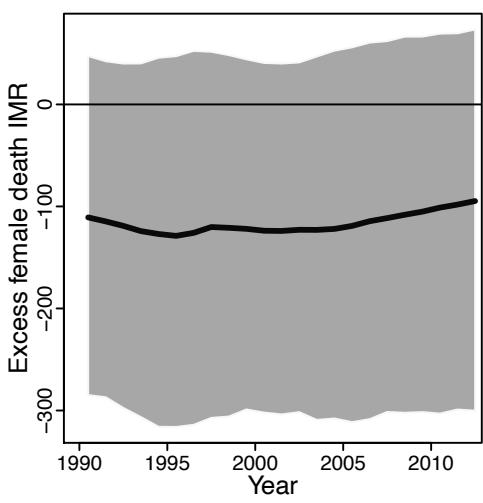
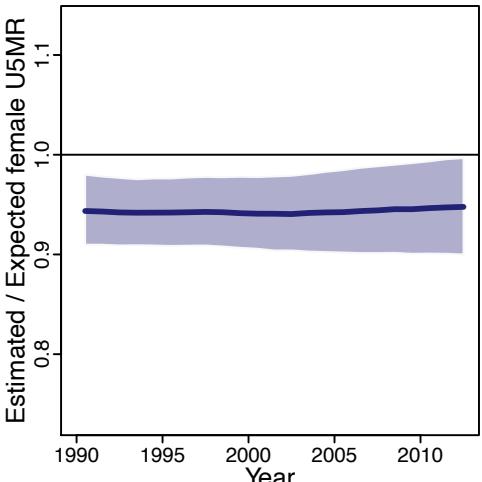
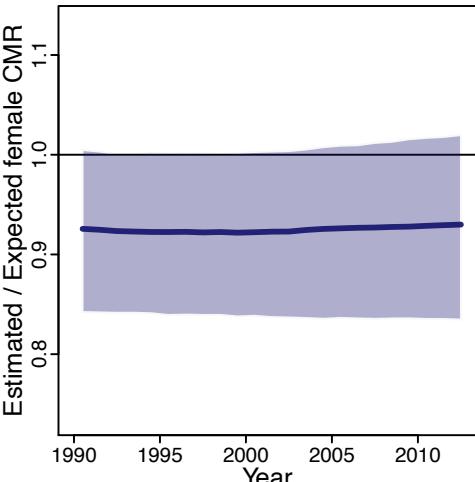
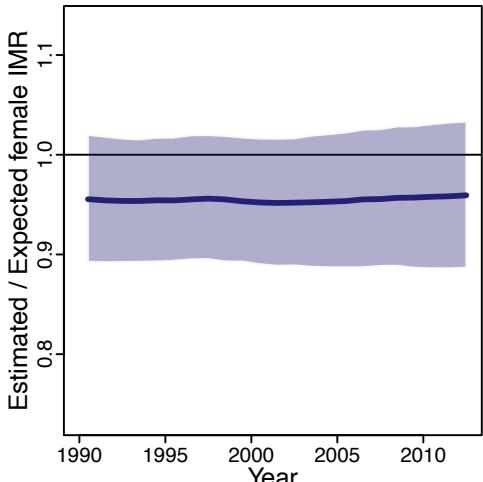
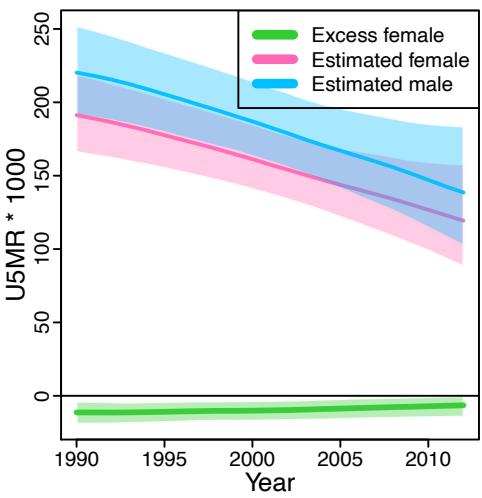
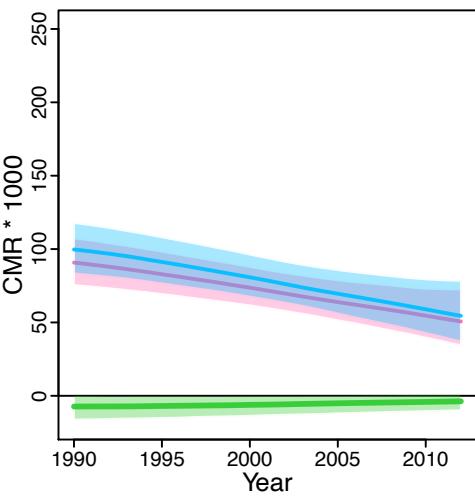
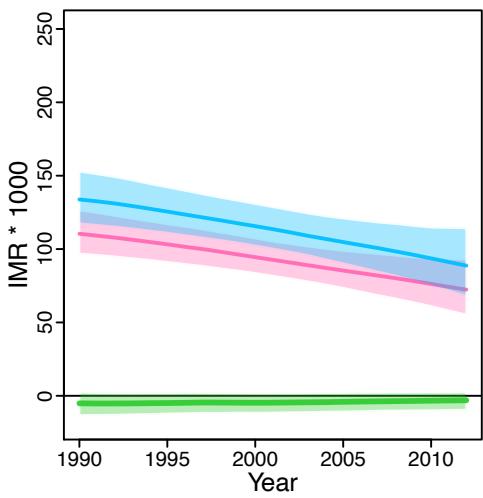
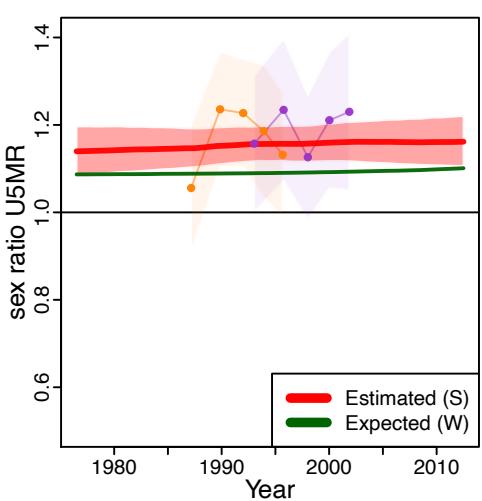
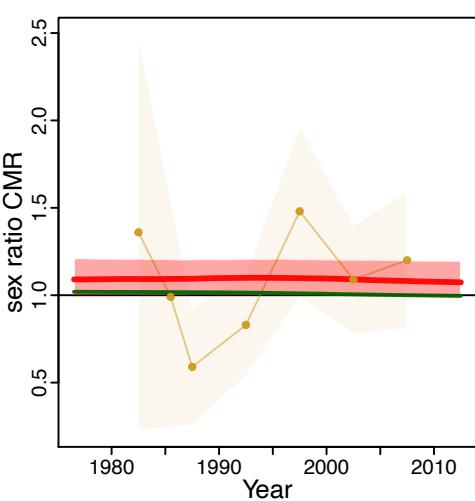
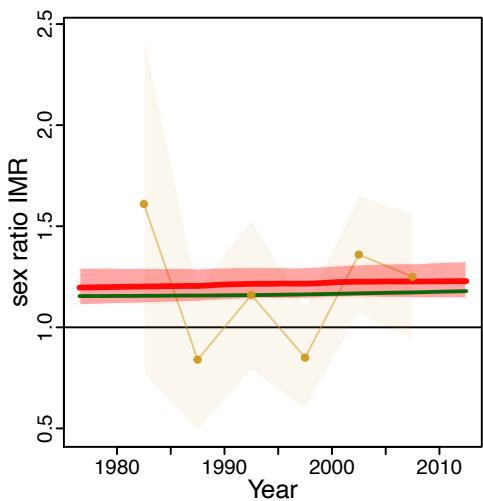
# Guatemala



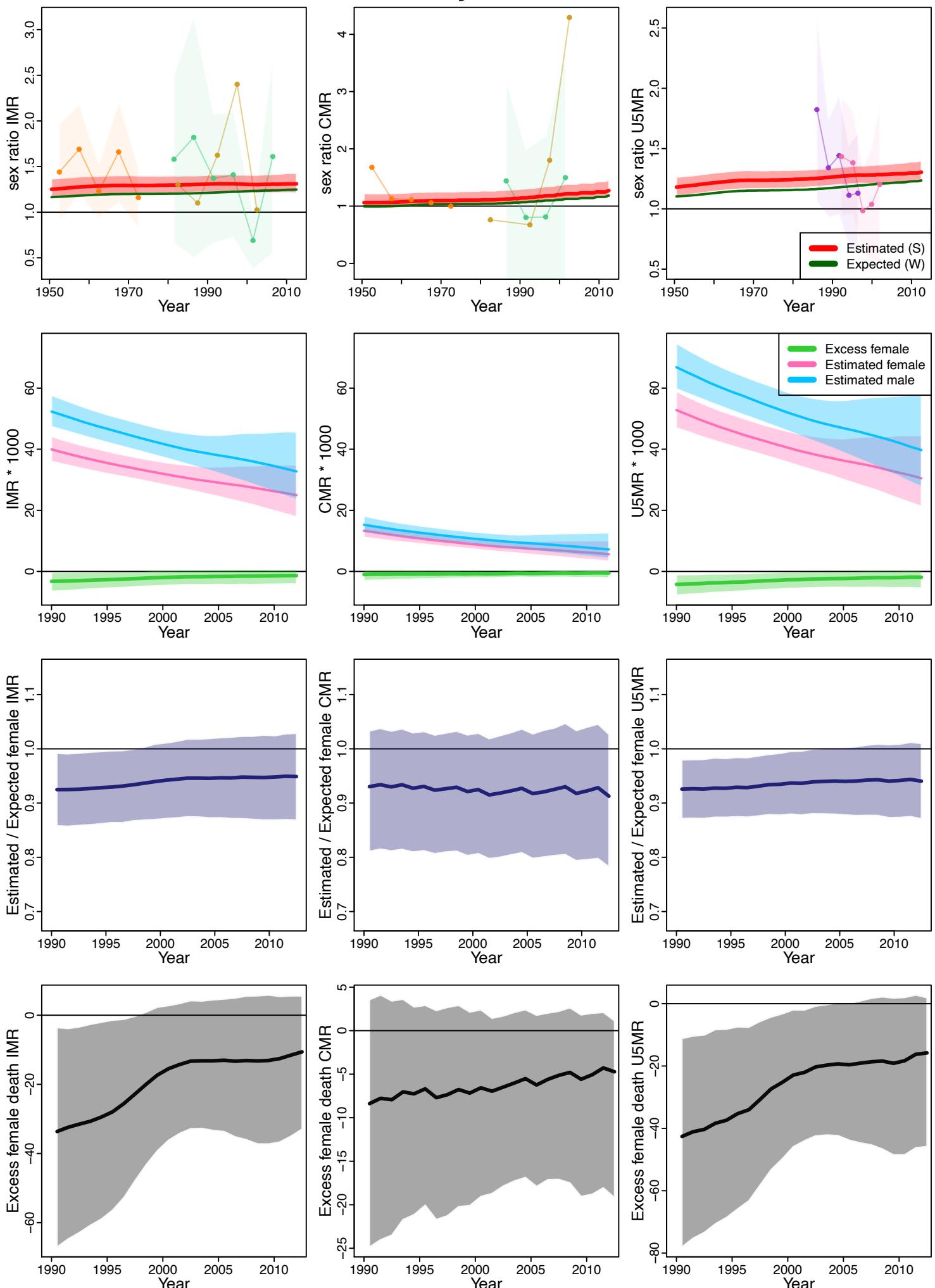
# Guinea



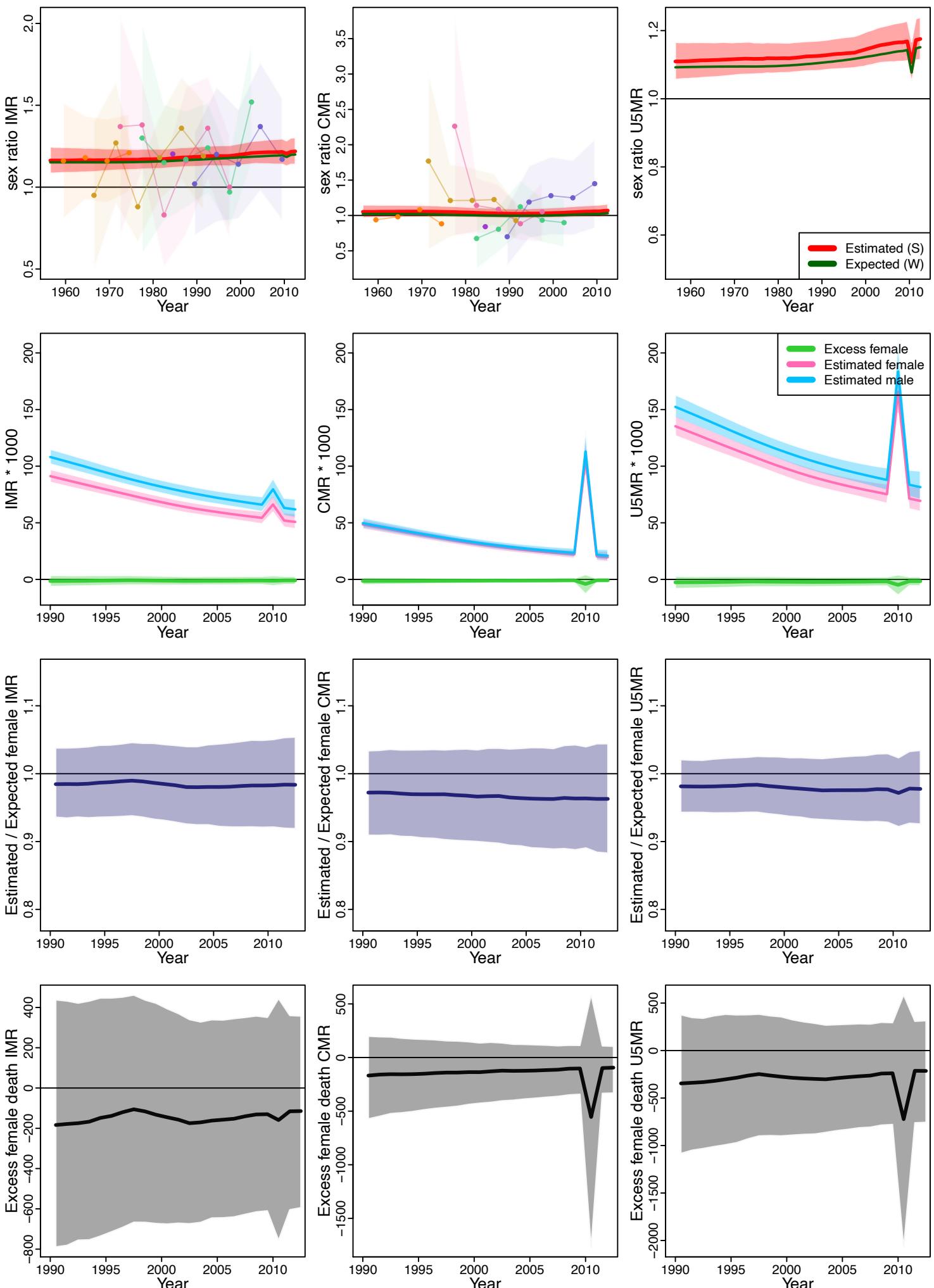
# Guinea-Bissau



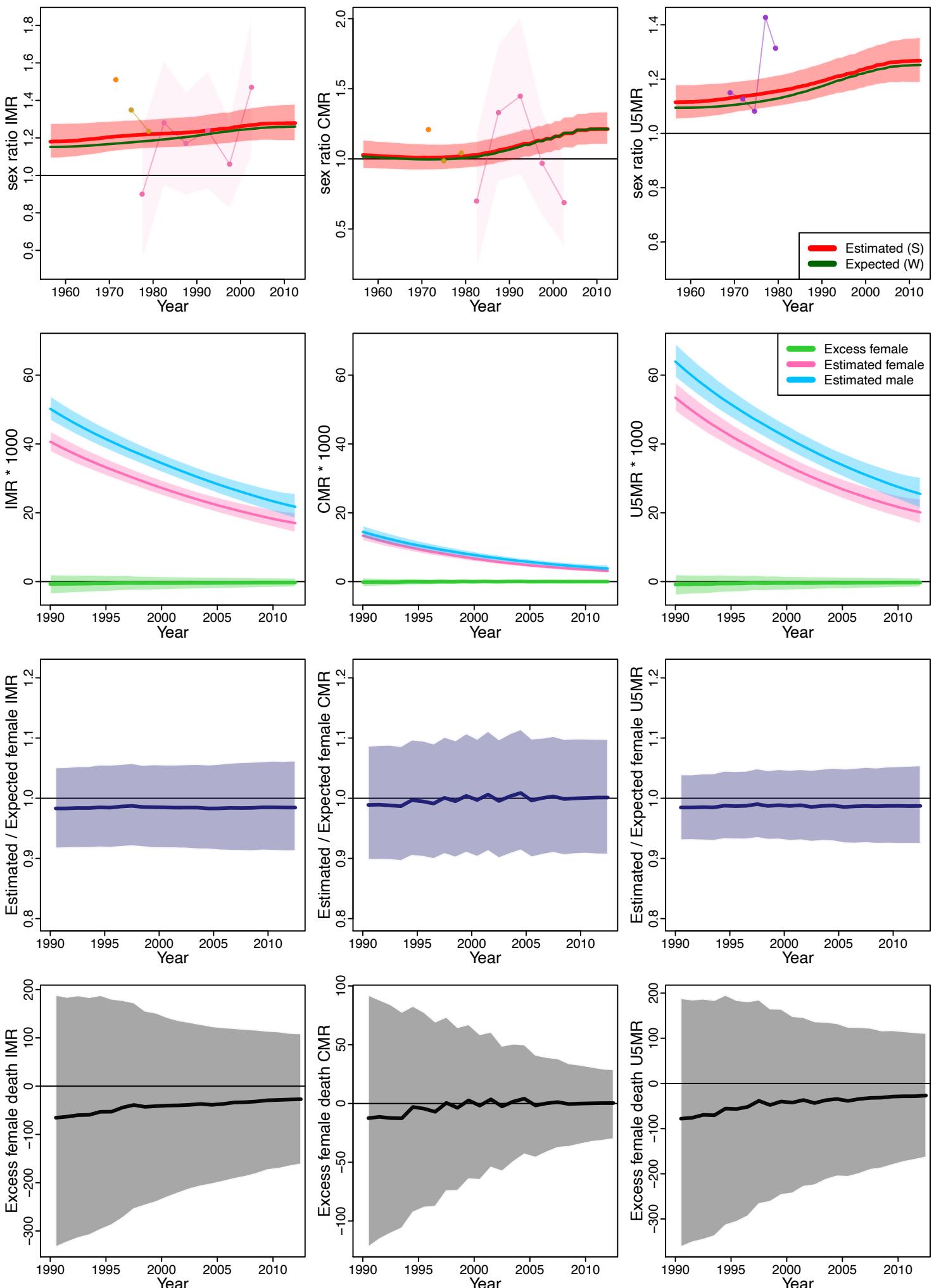
# Guyana



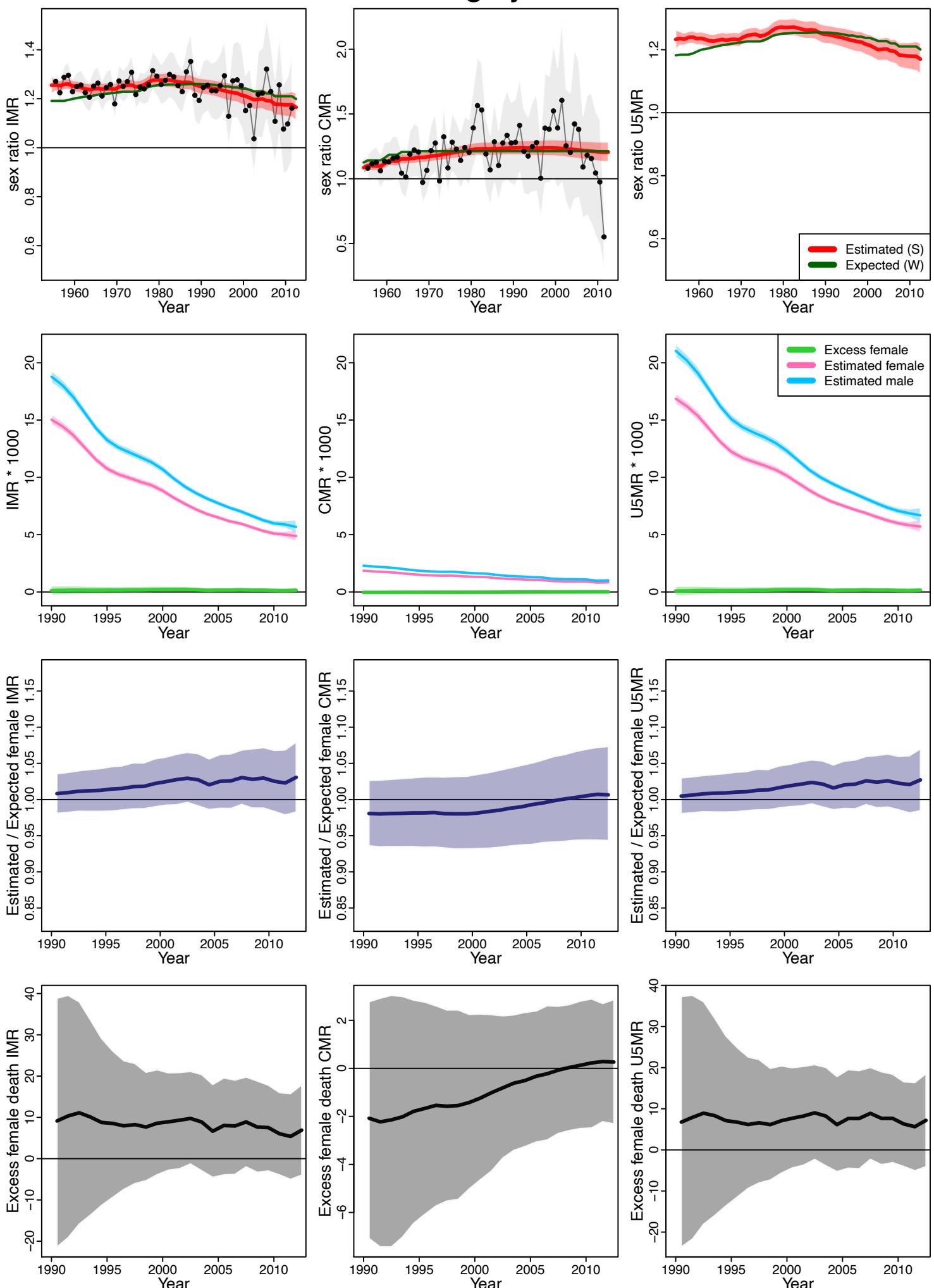
# Haiti



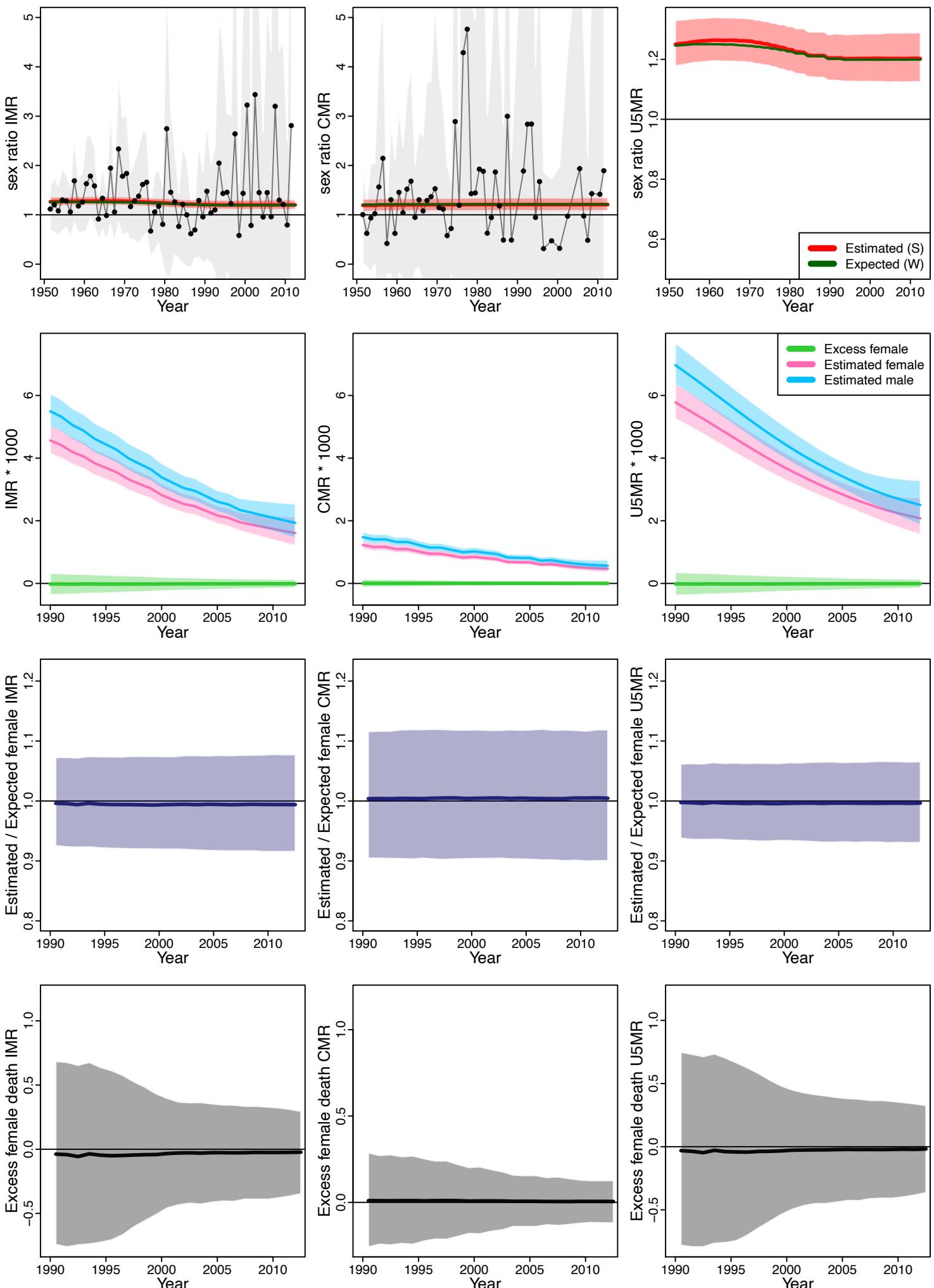
# Honduras



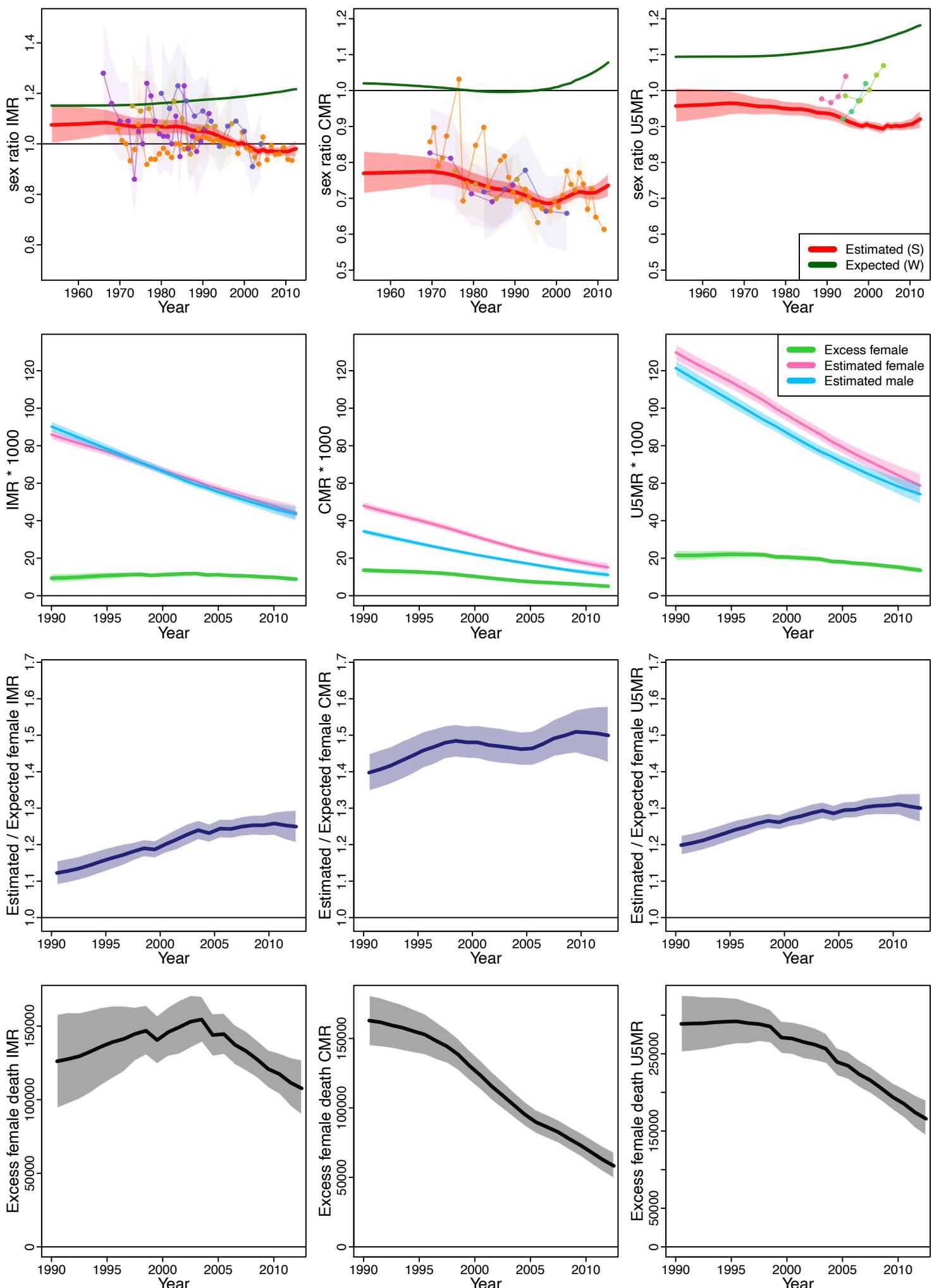
# Hungary



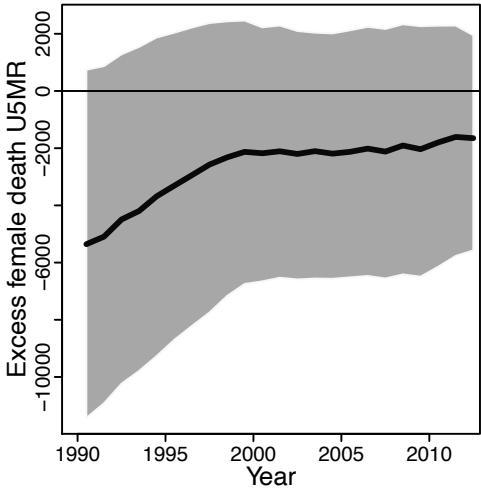
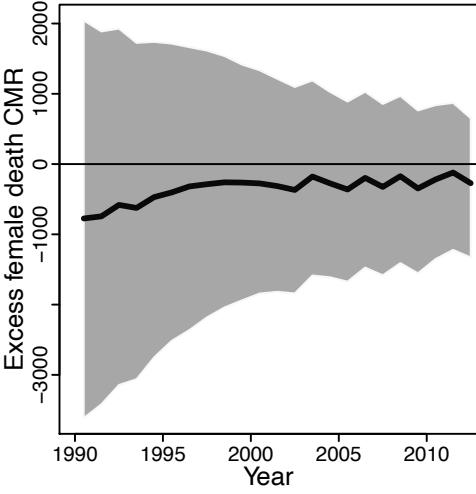
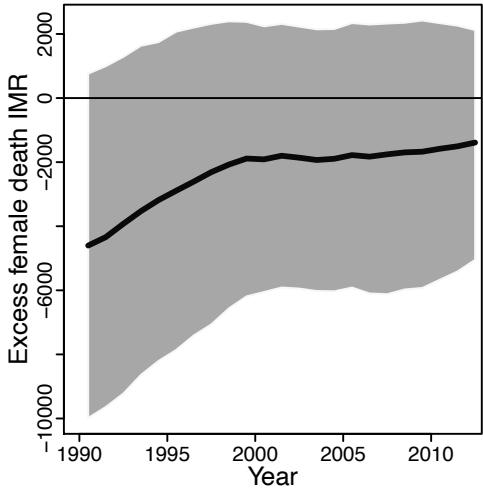
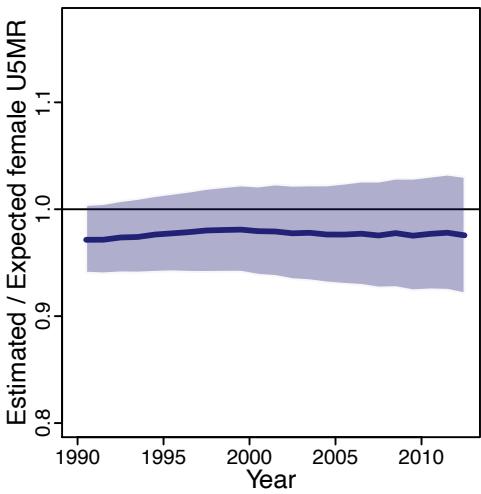
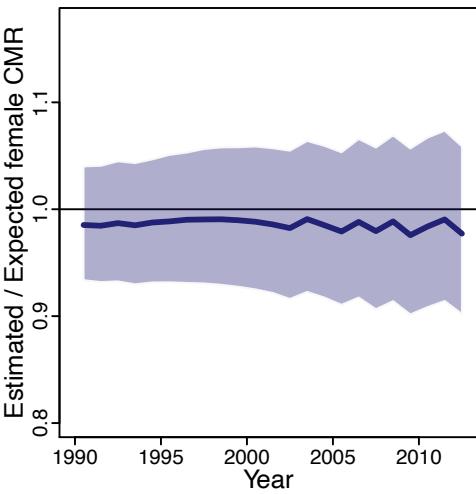
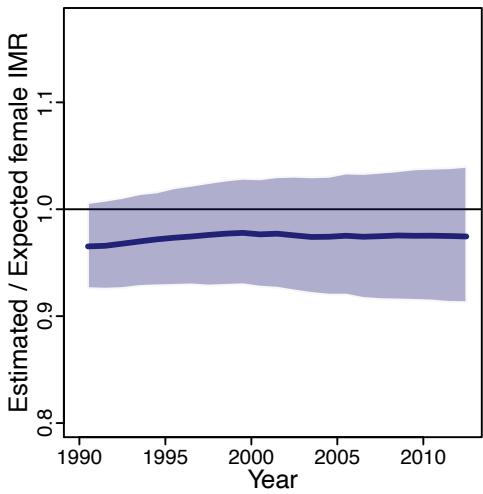
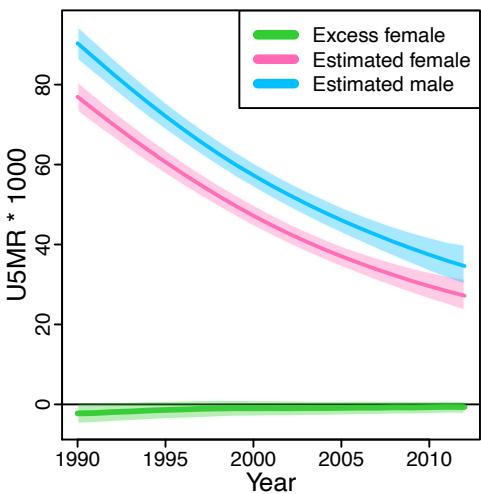
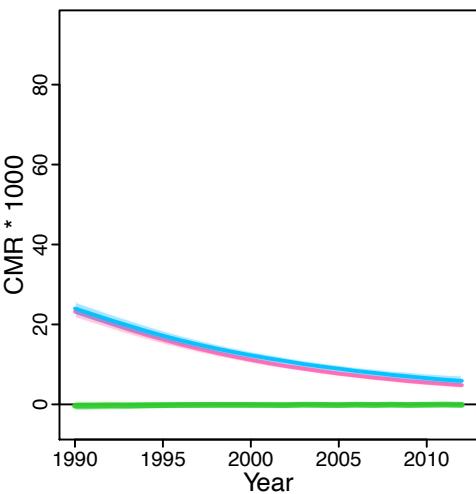
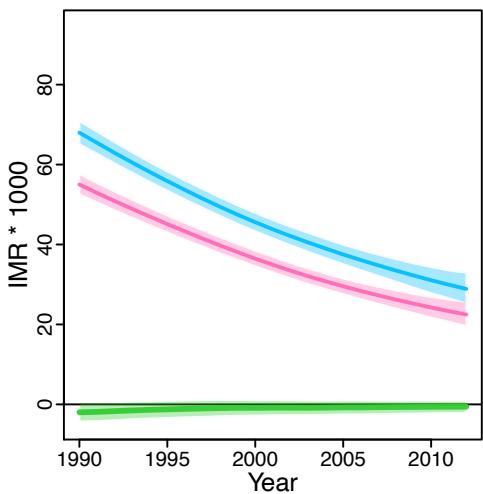
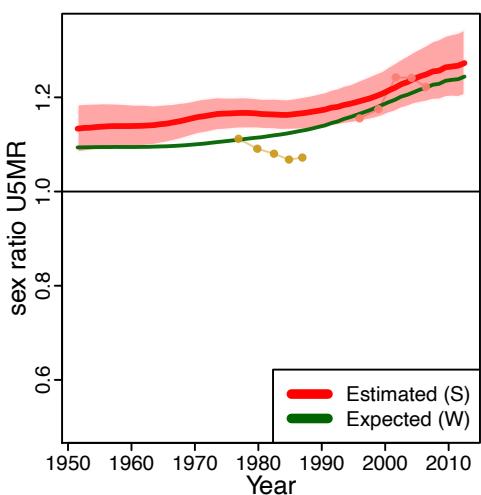
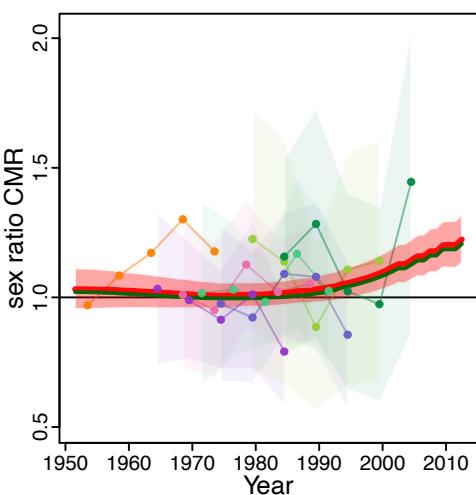
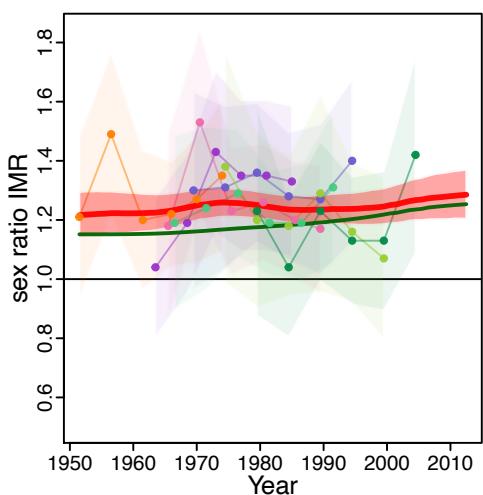
# Iceland



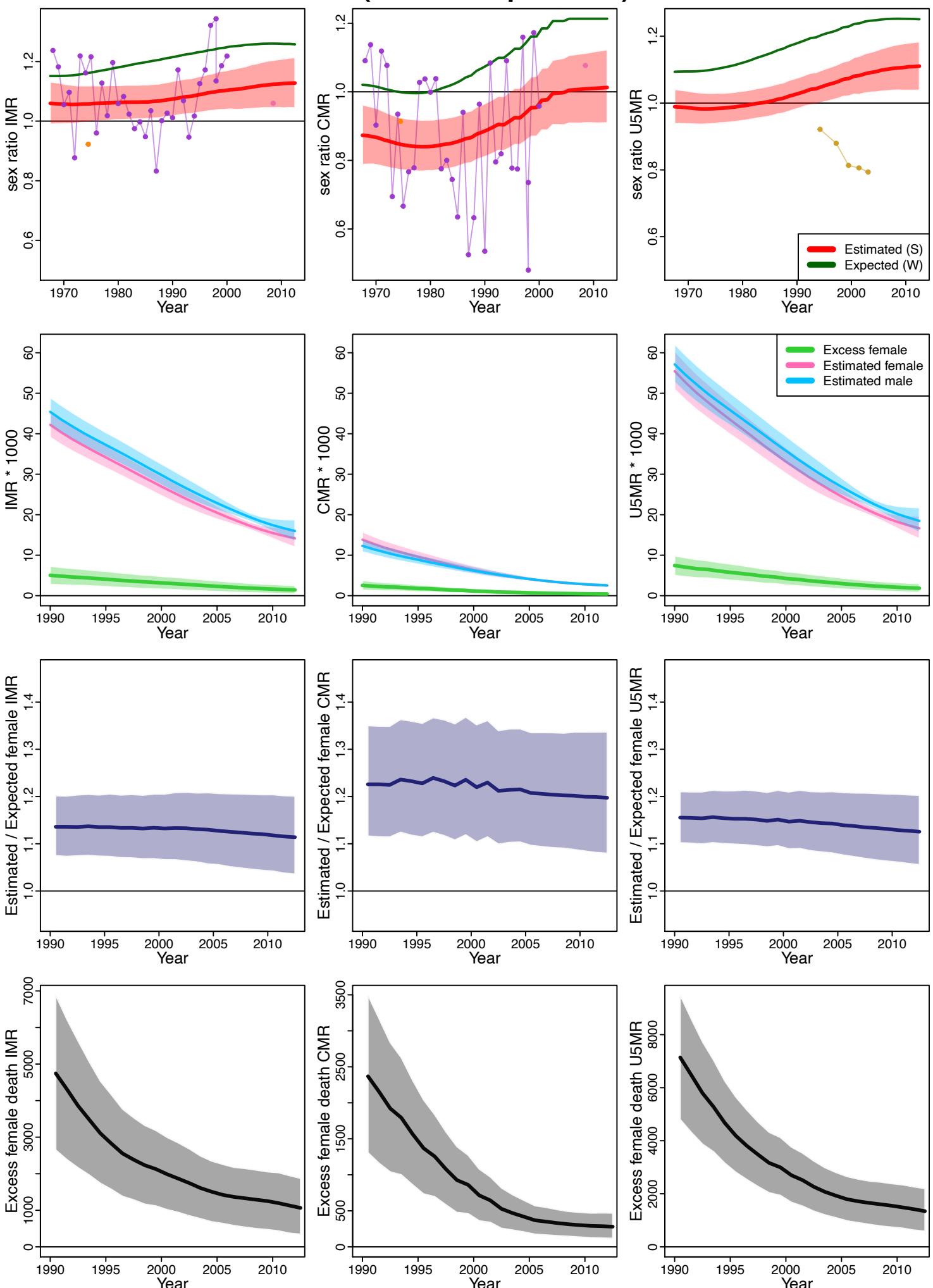
# India



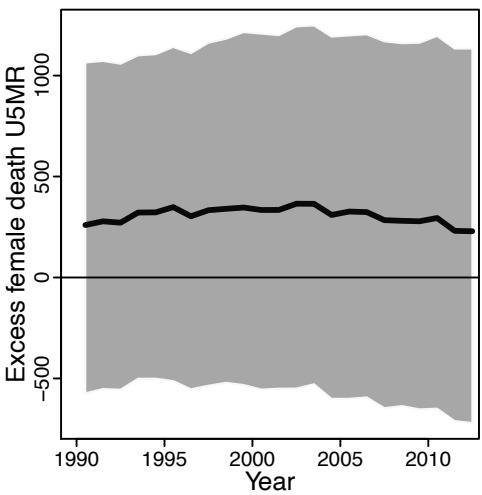
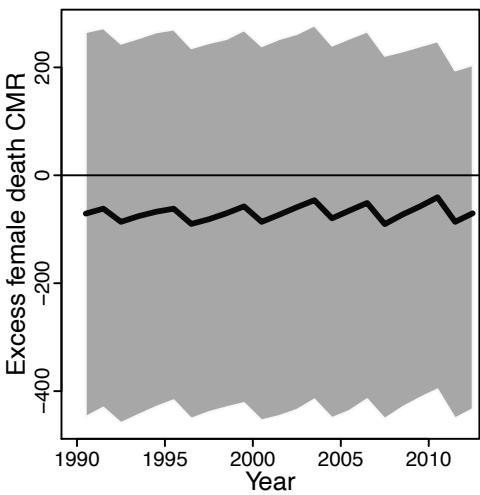
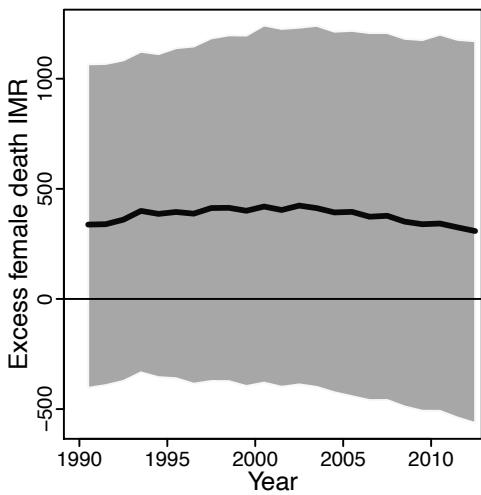
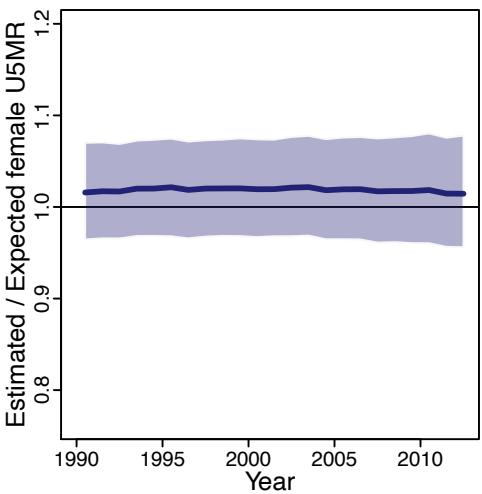
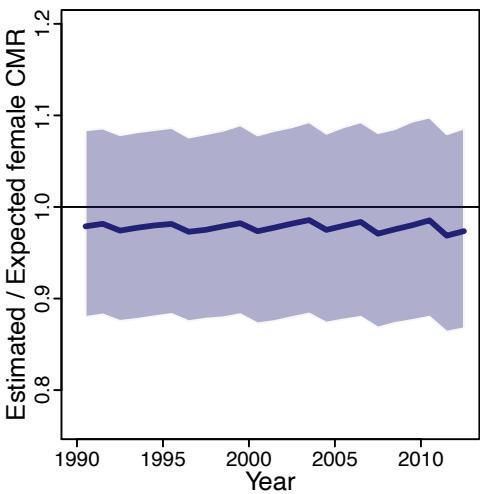
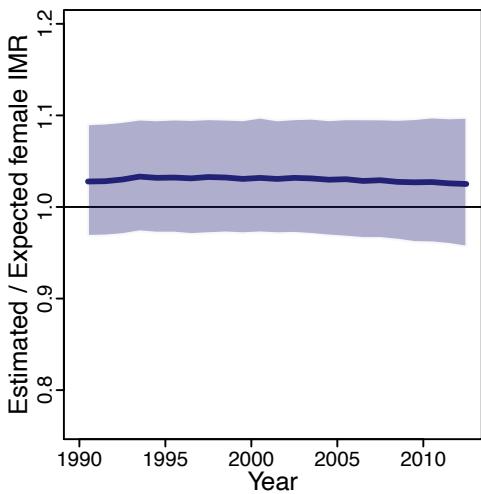
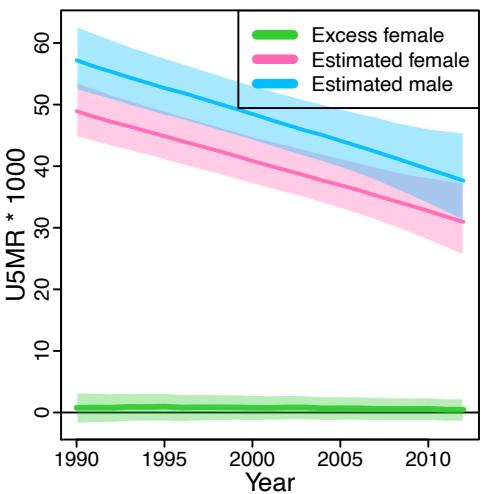
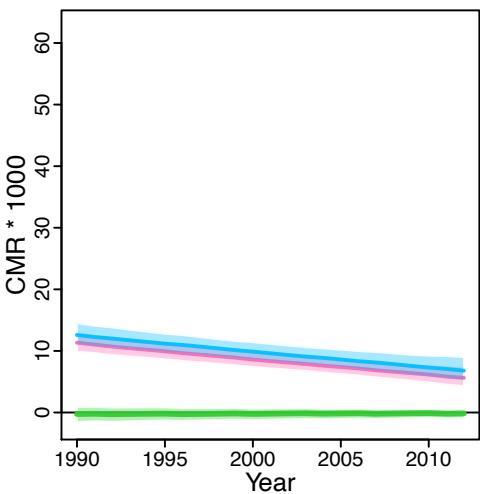
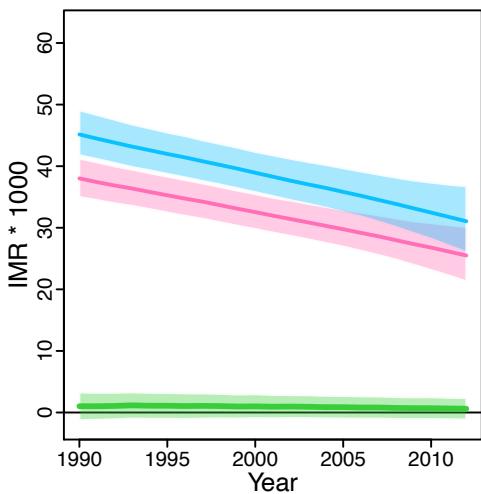
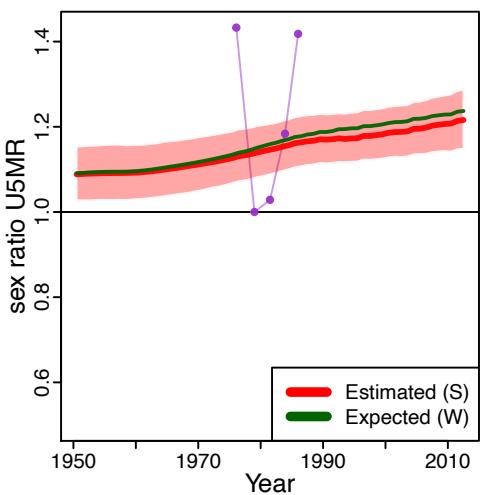
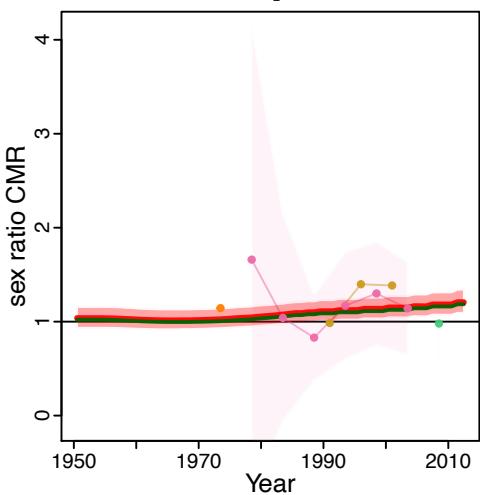
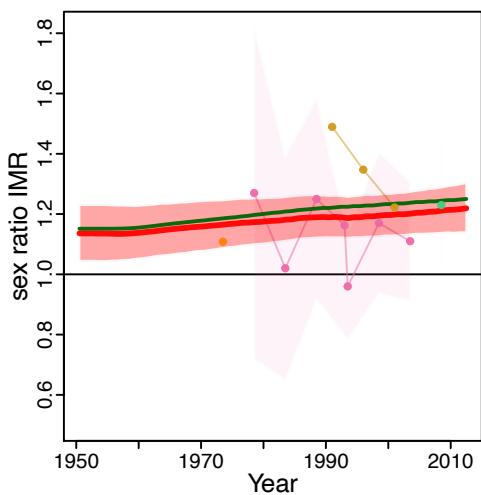
# Indonesia



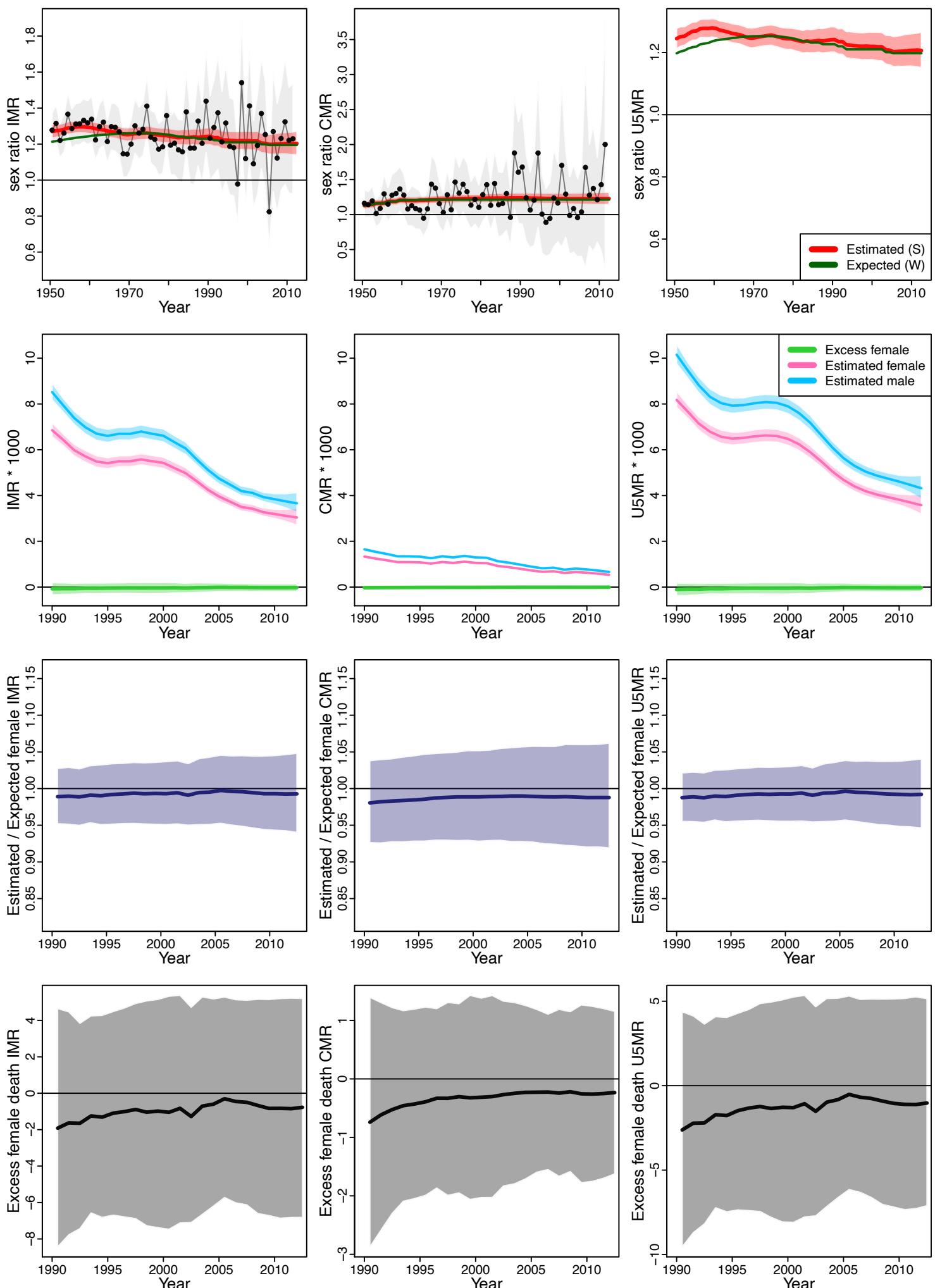
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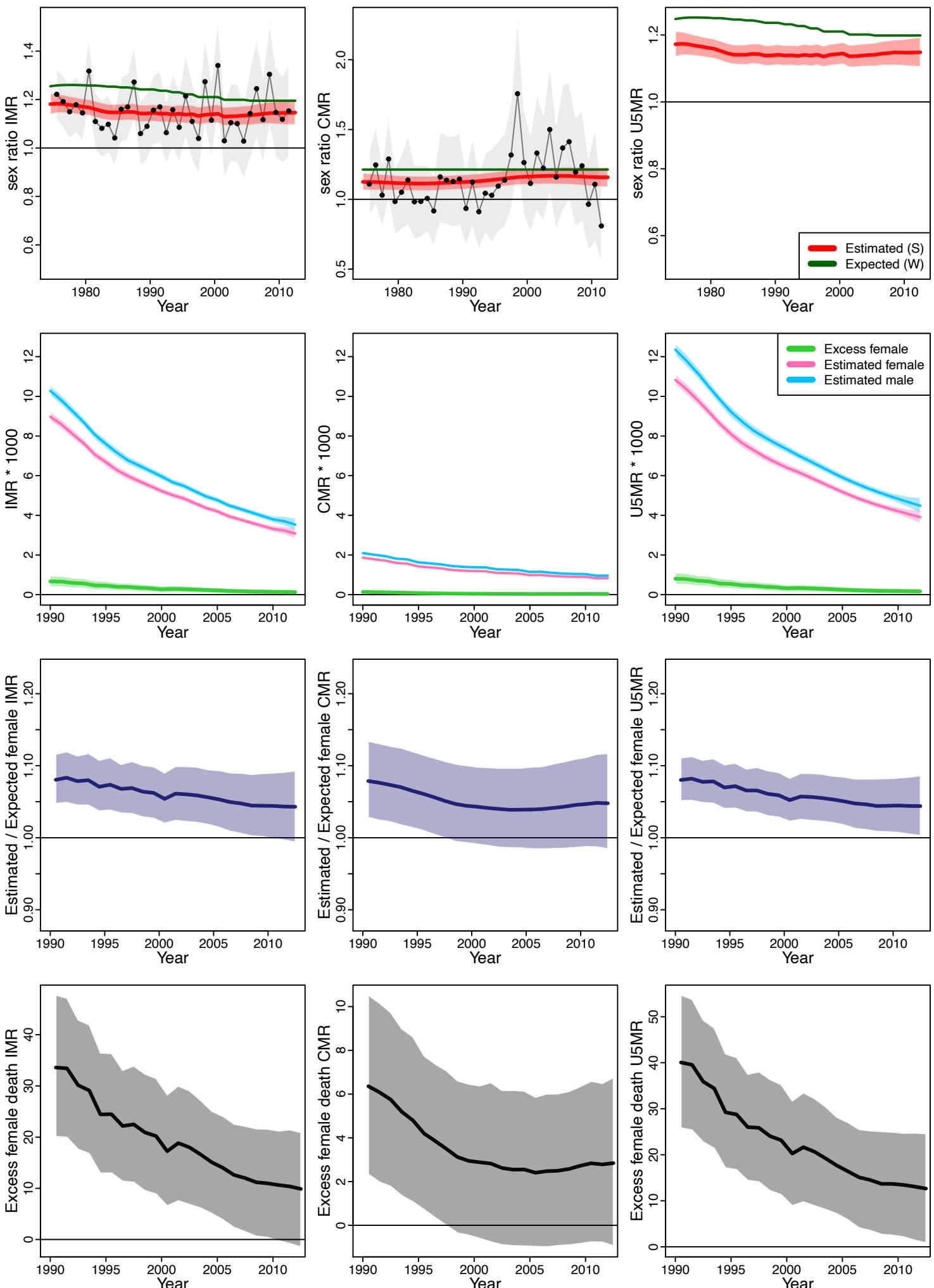
# Iraq



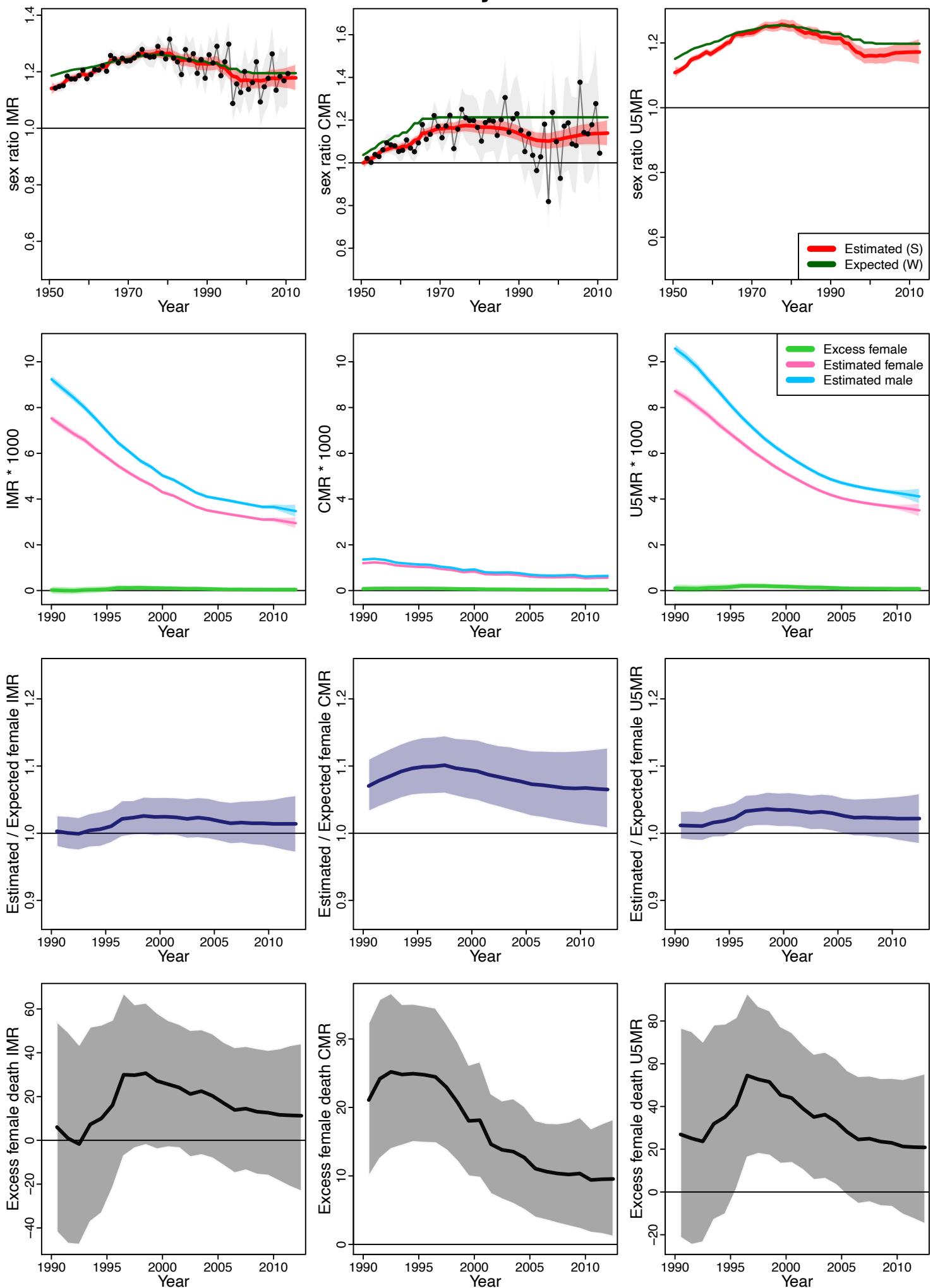
# Ireland



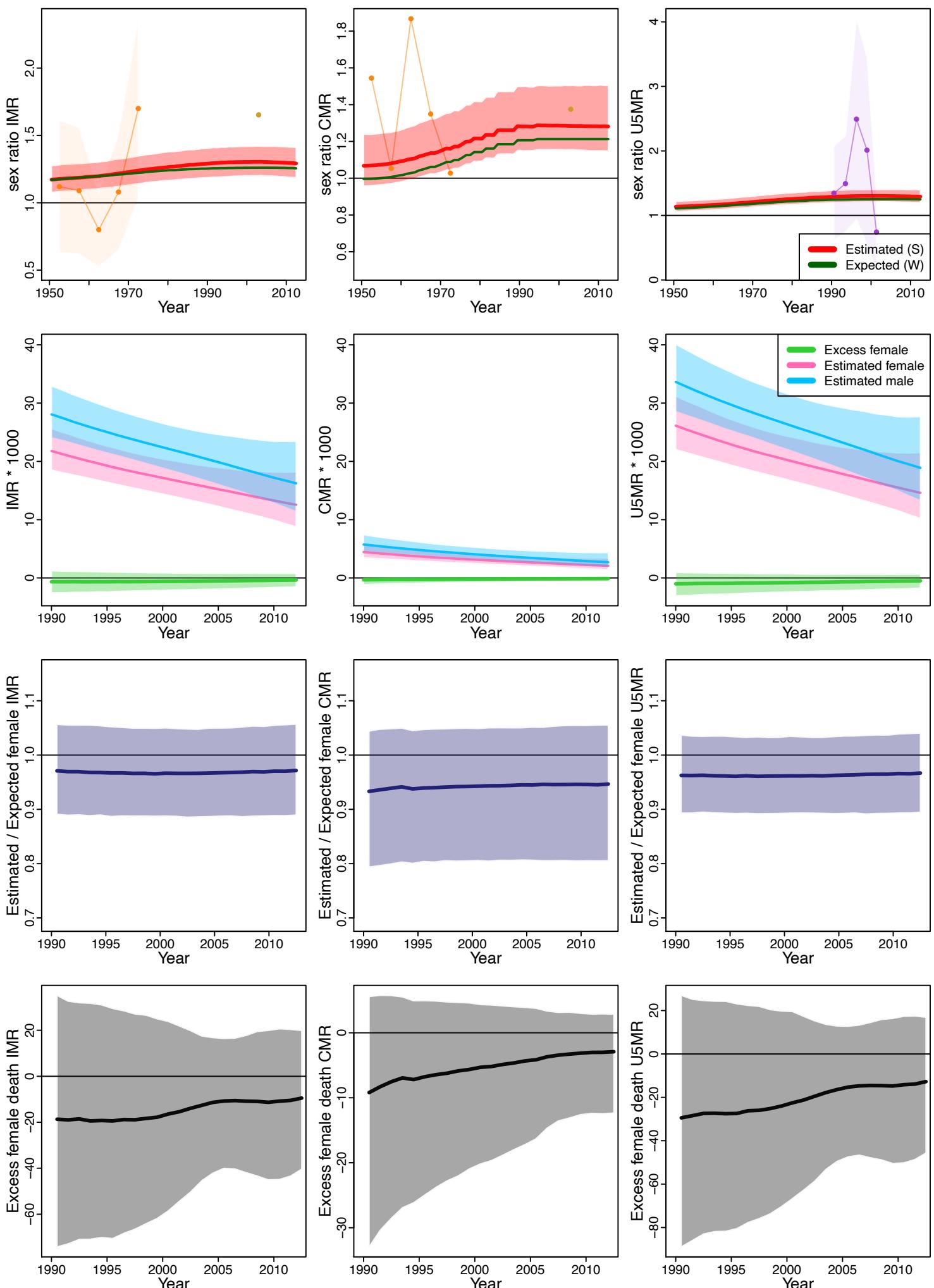
# Israel



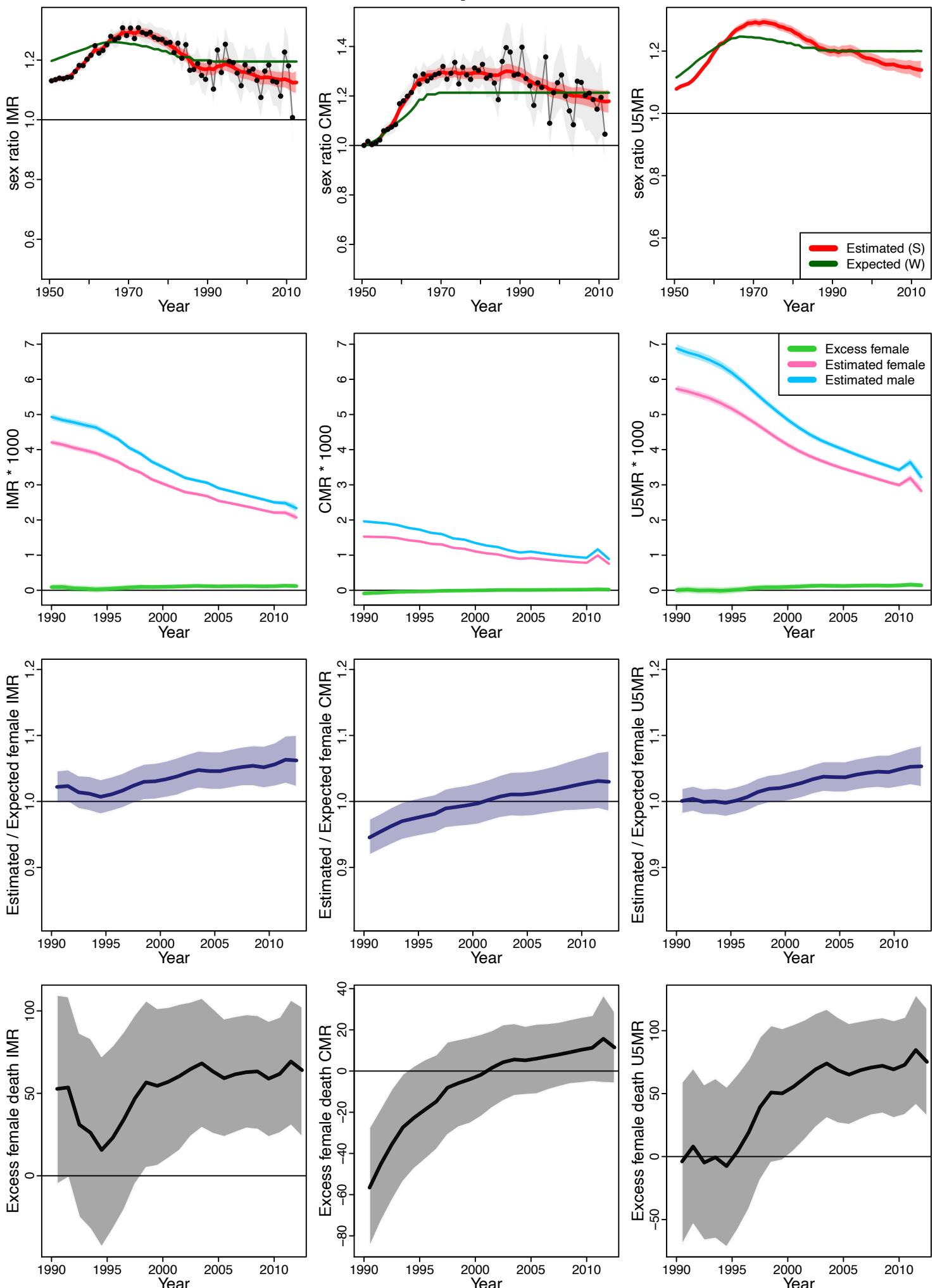
# Italy



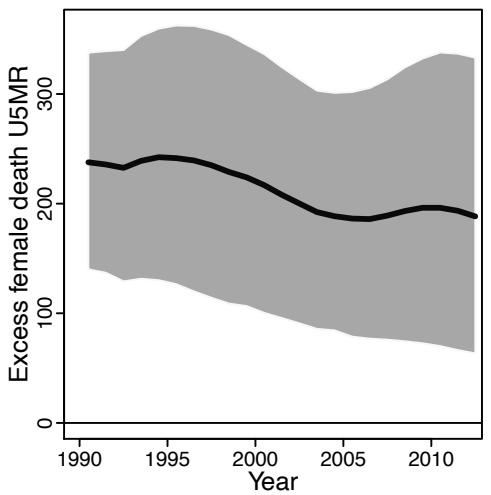
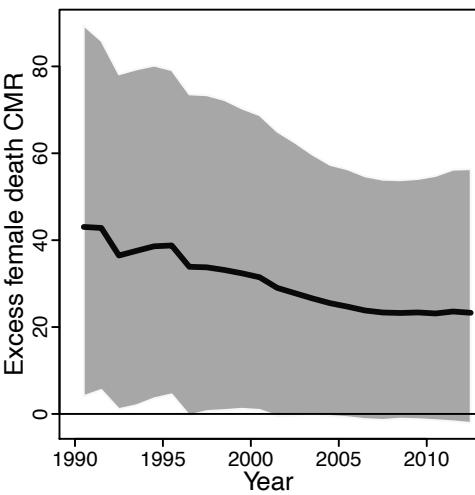
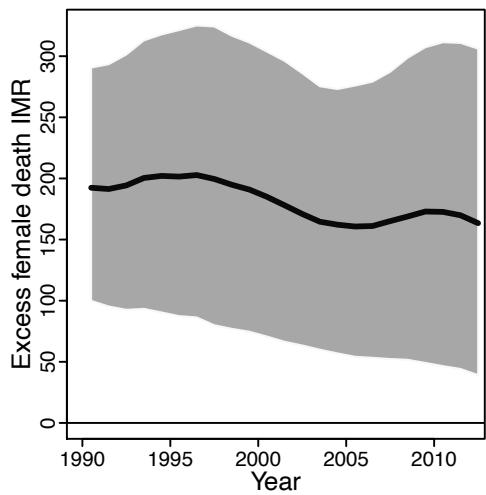
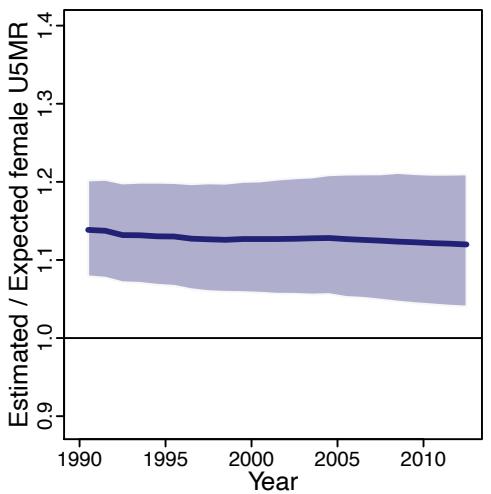
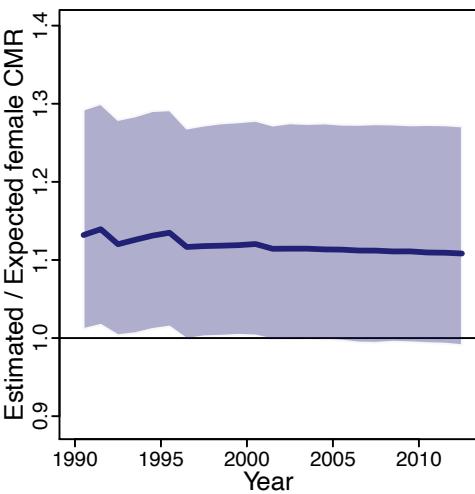
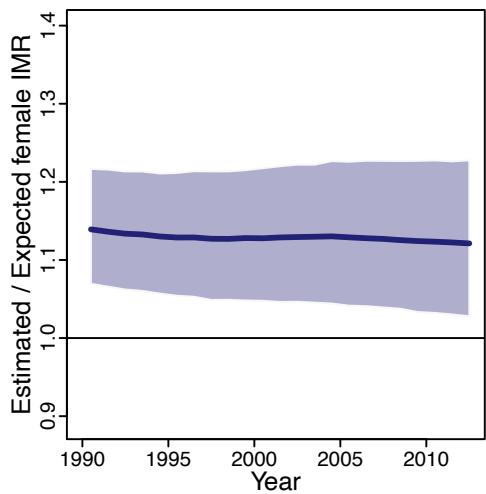
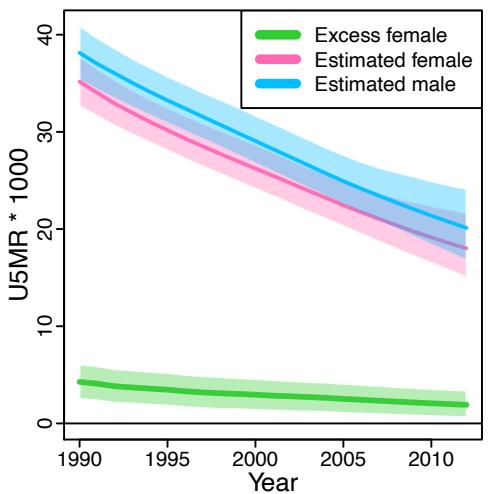
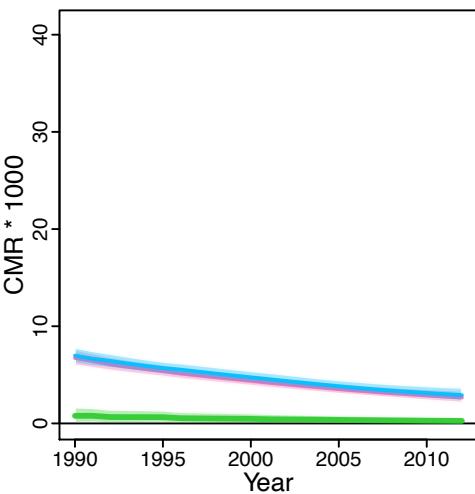
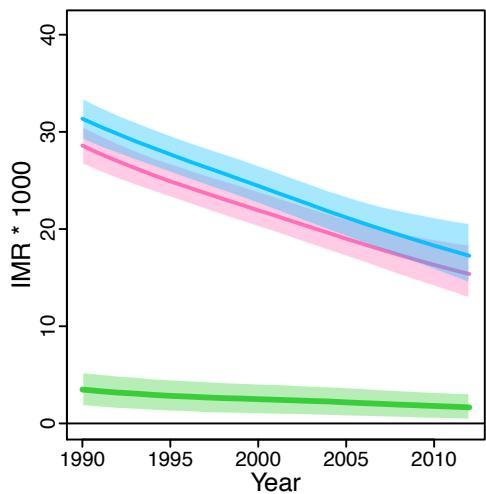
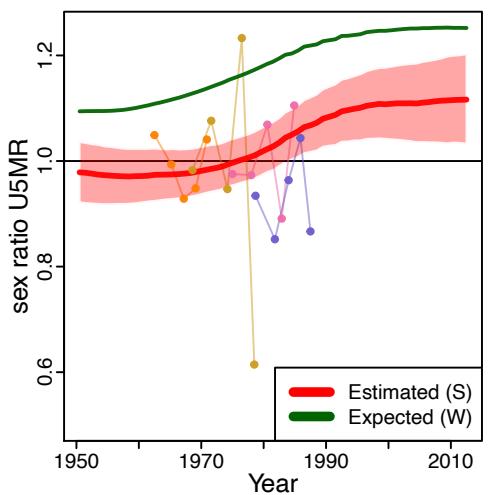
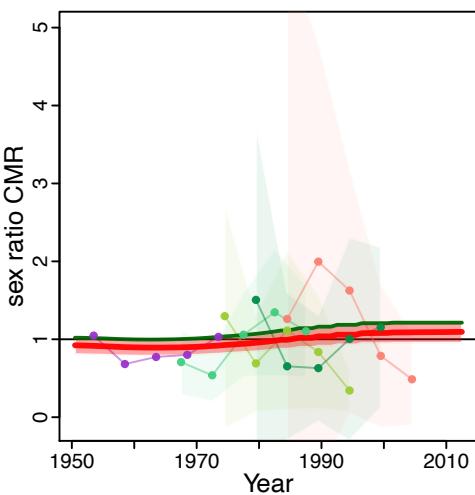
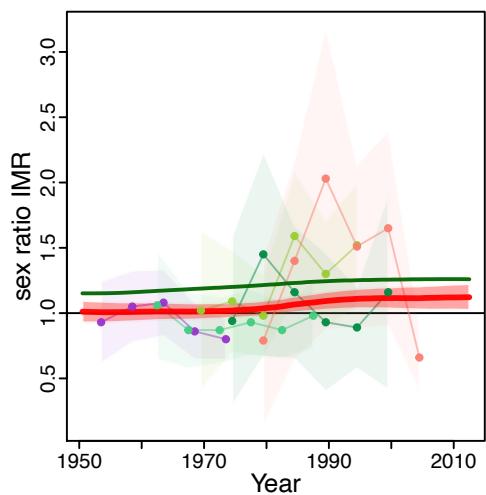
# Jamaica



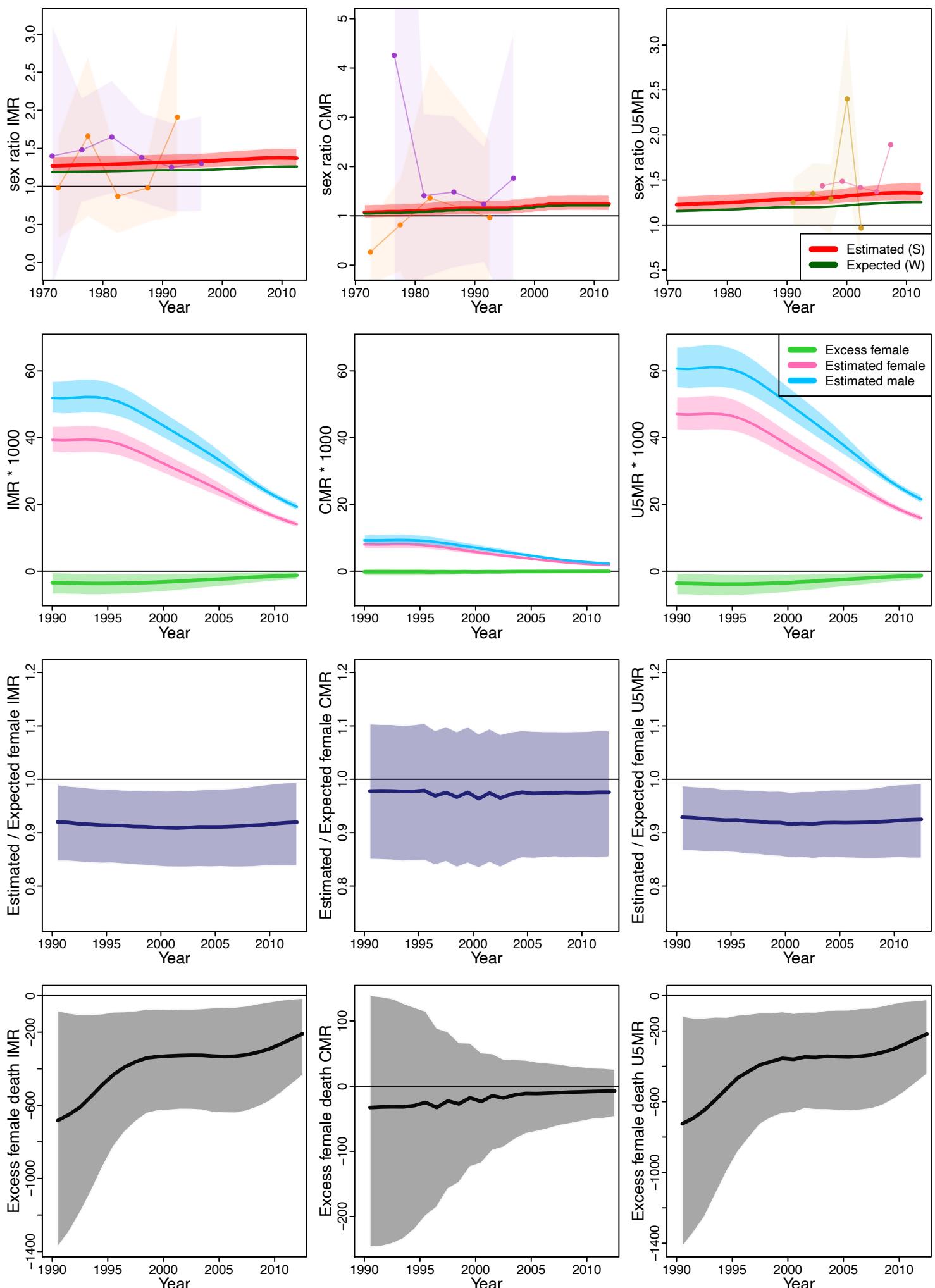
# Japan



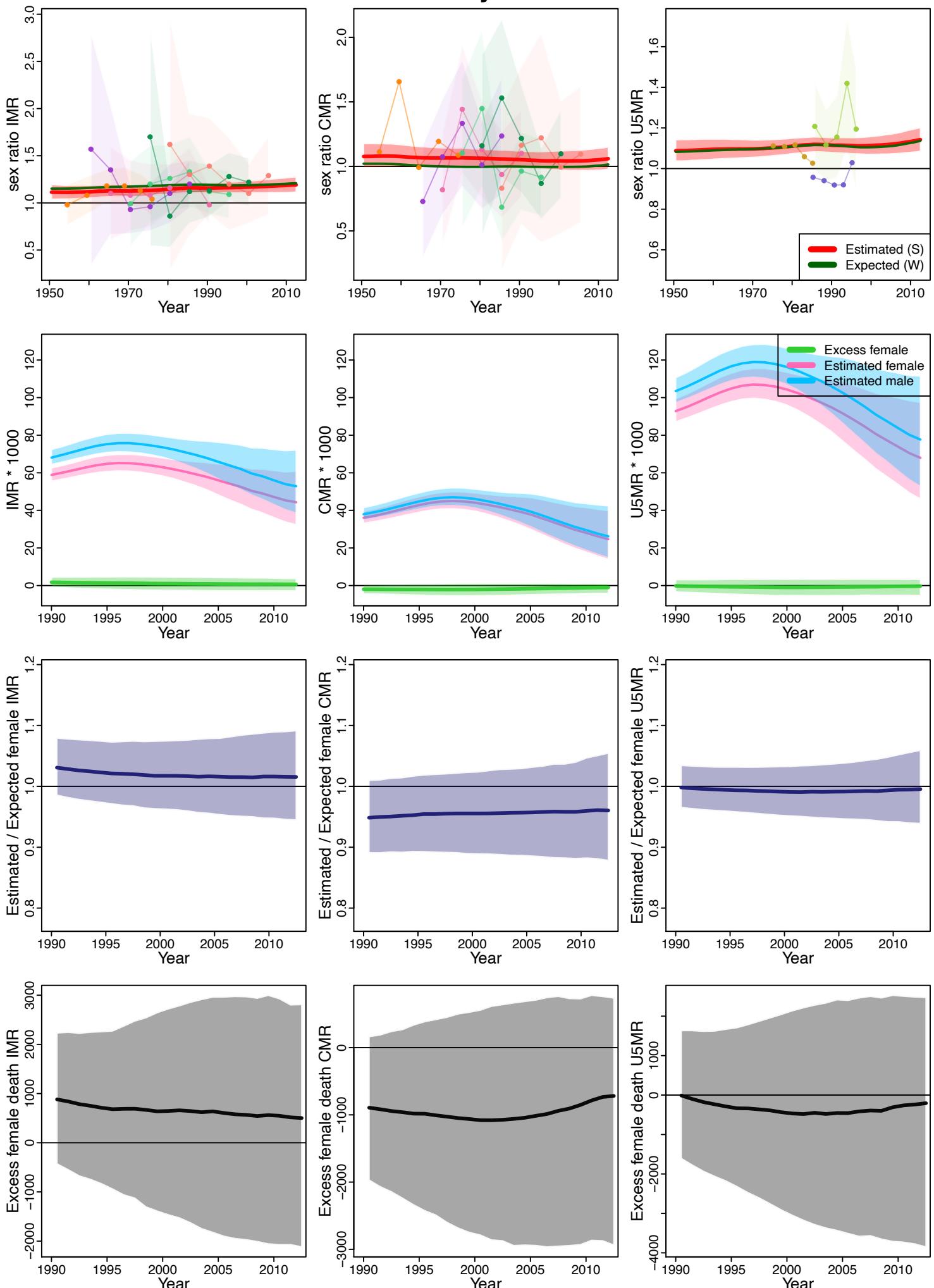
# Jordan



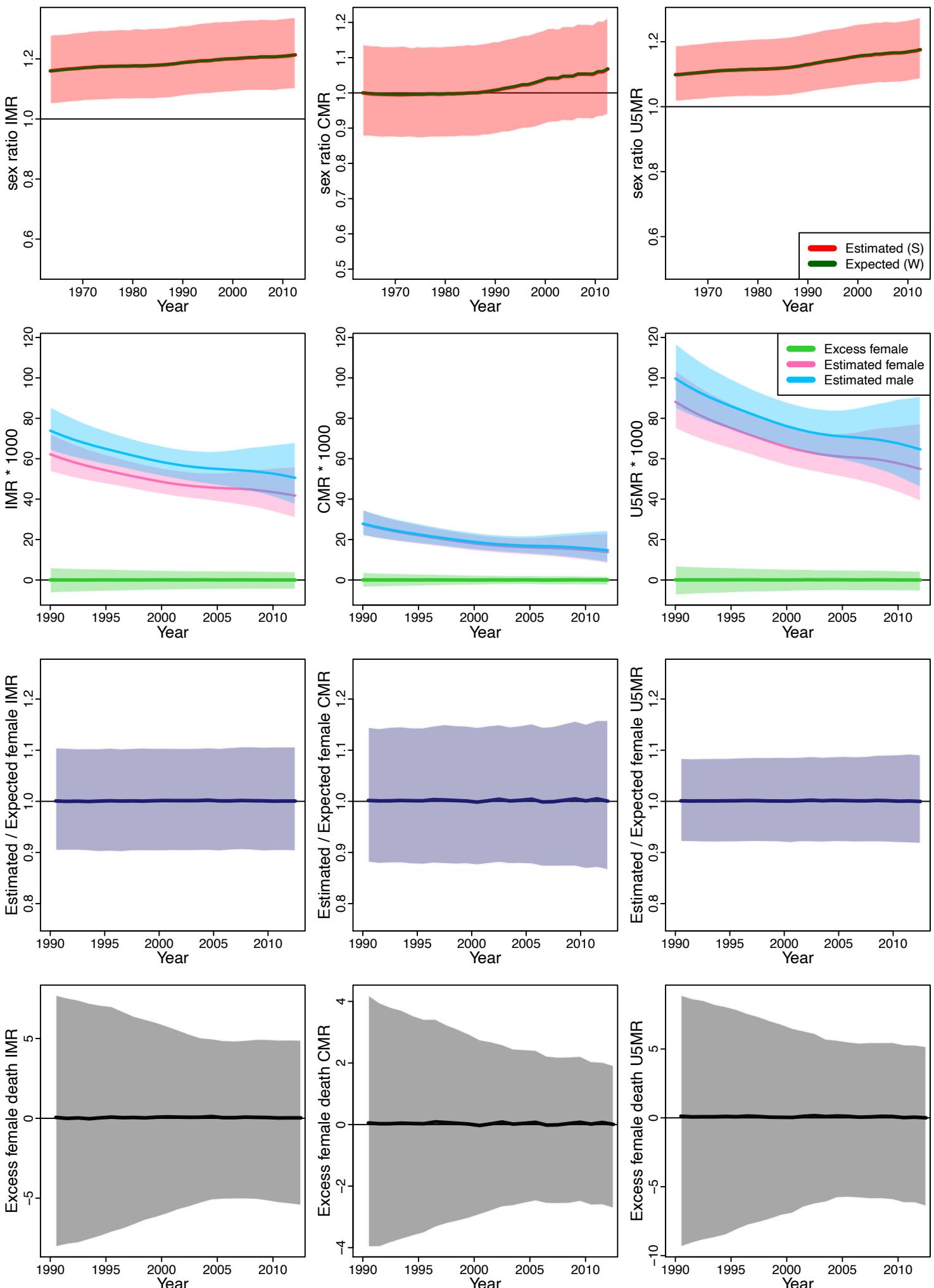
# Kazakhstan



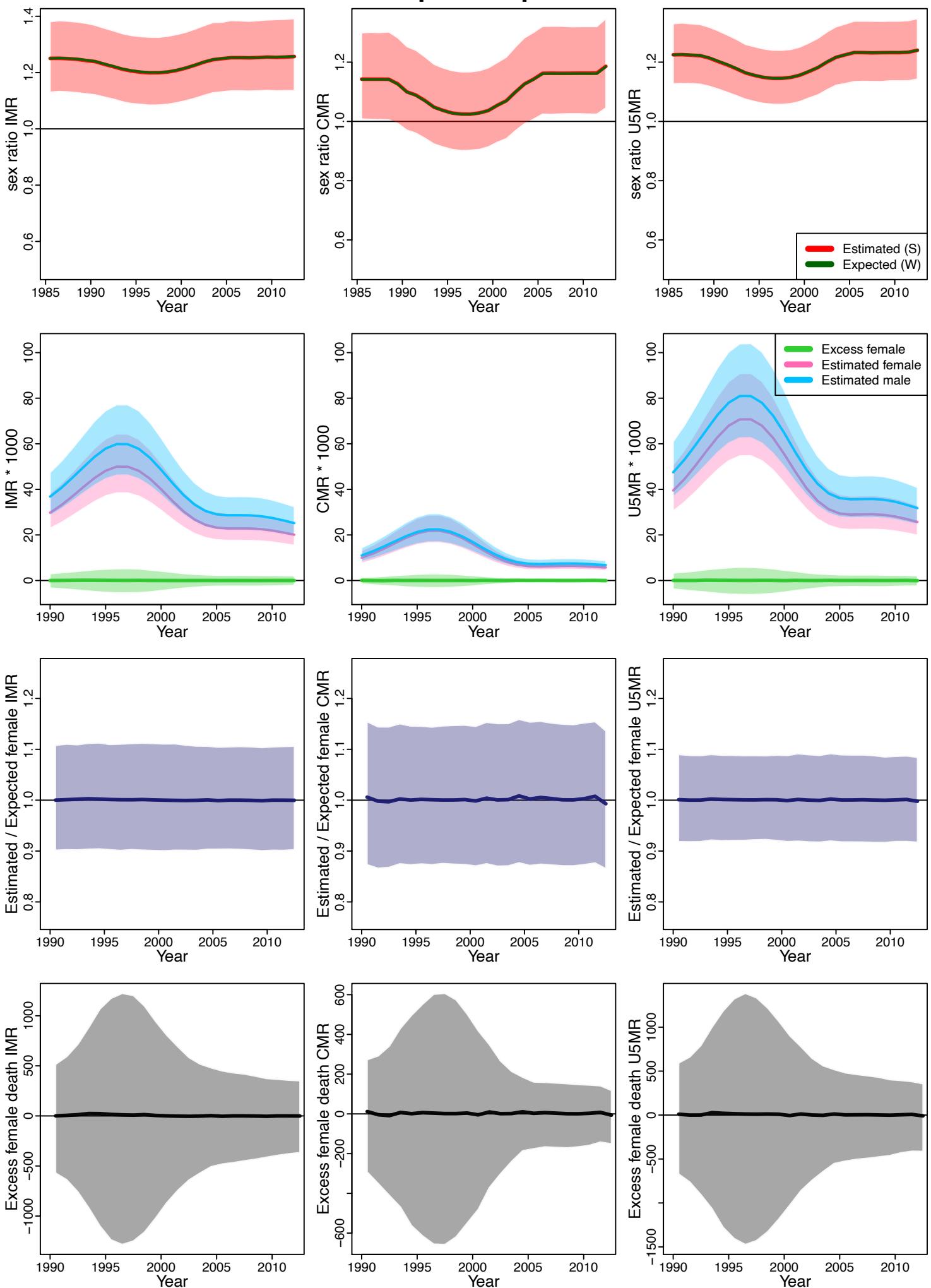
# Kenya



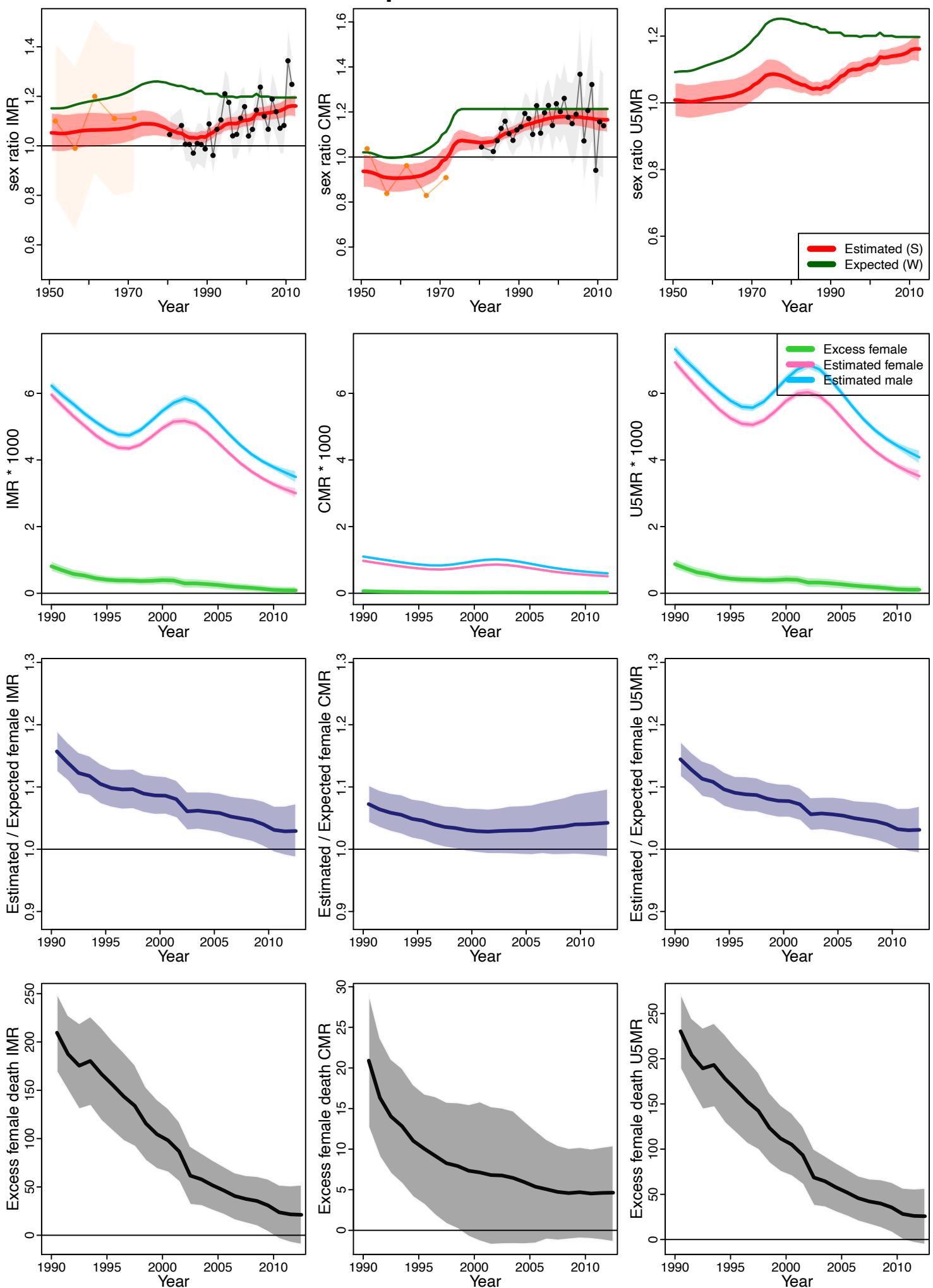
# Kiribati



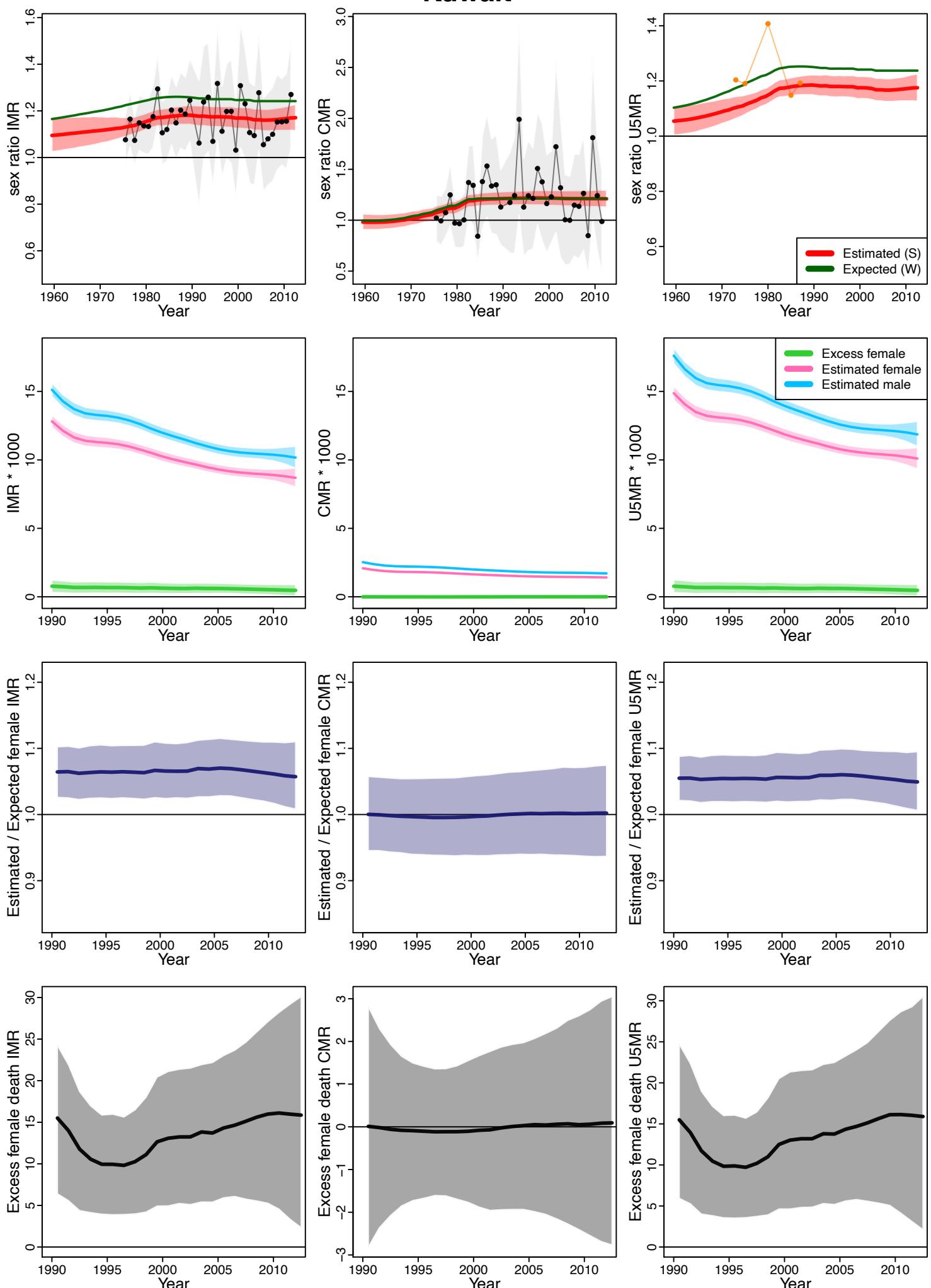
# Democratic People's Republic of Korea



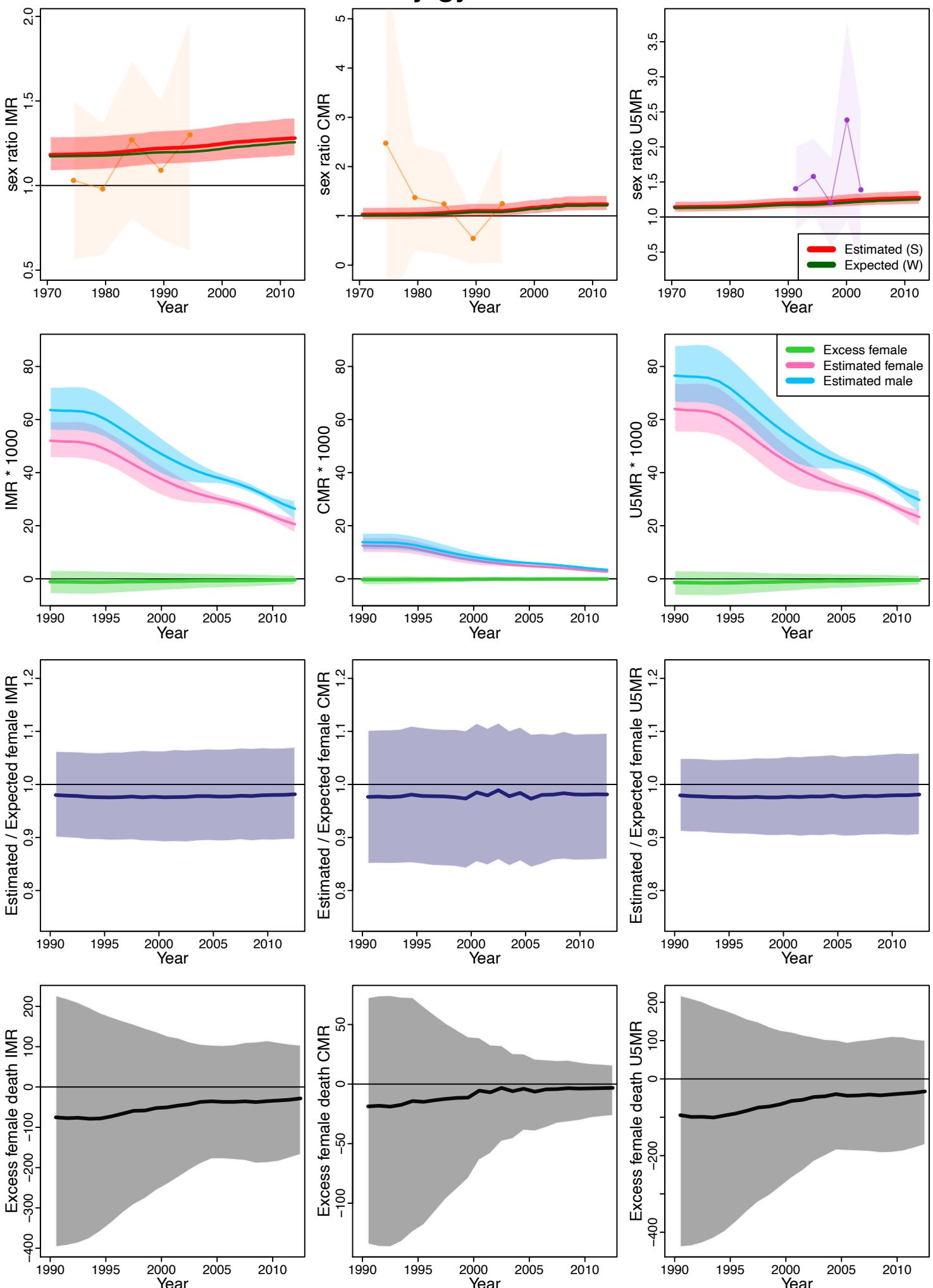
# Republic of Korea



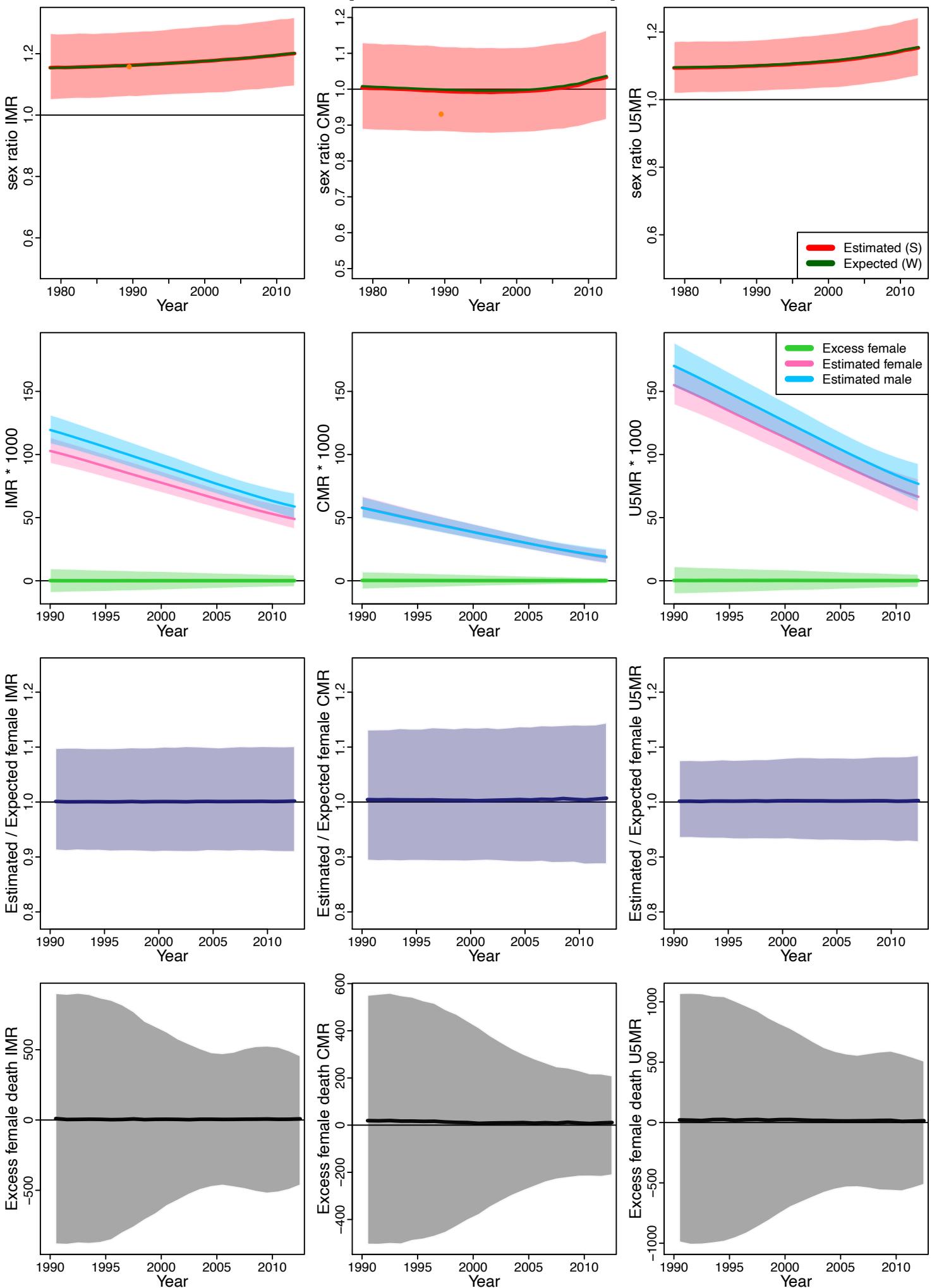
# Kuwait



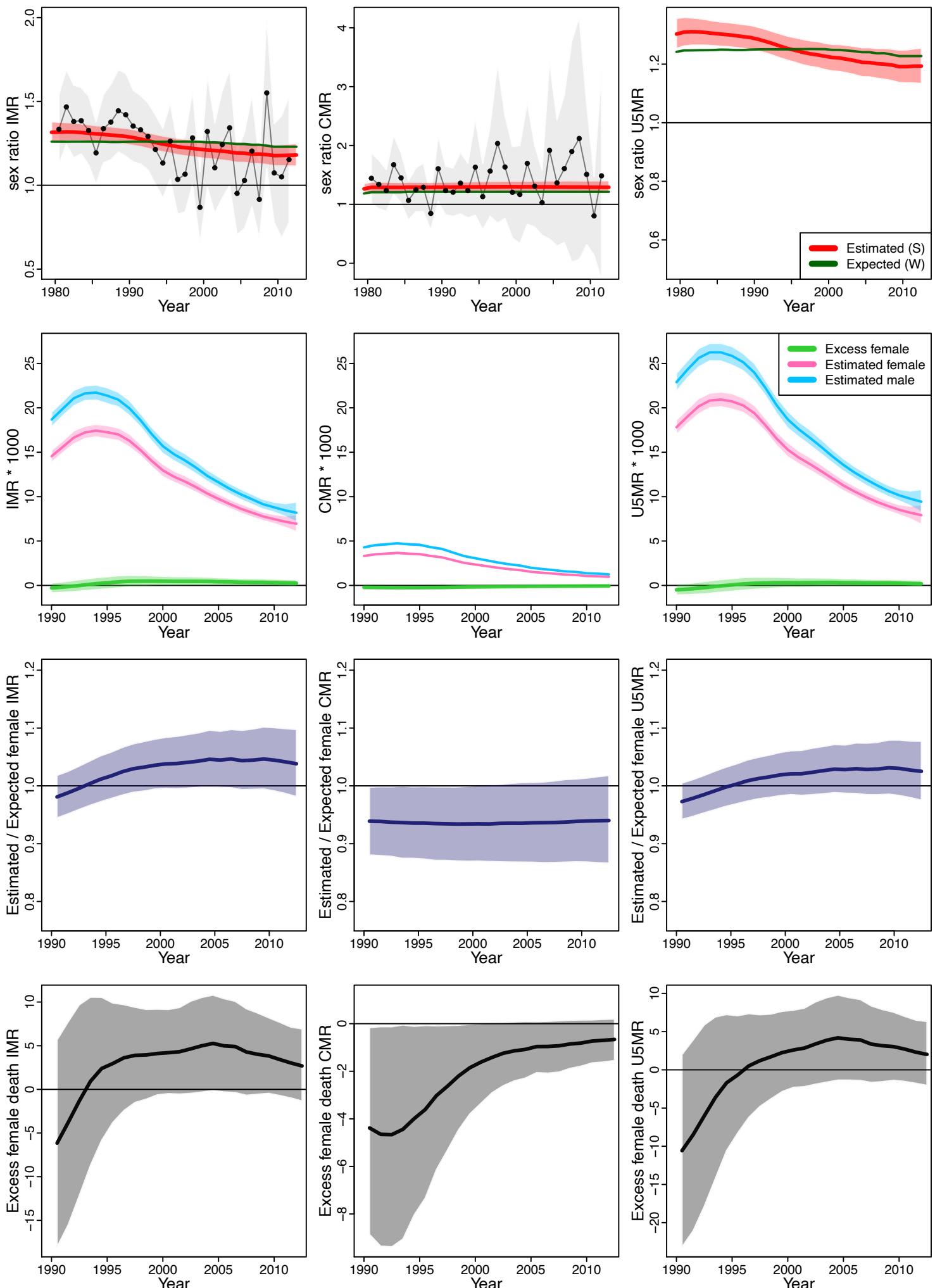
# Kyrgyzstan



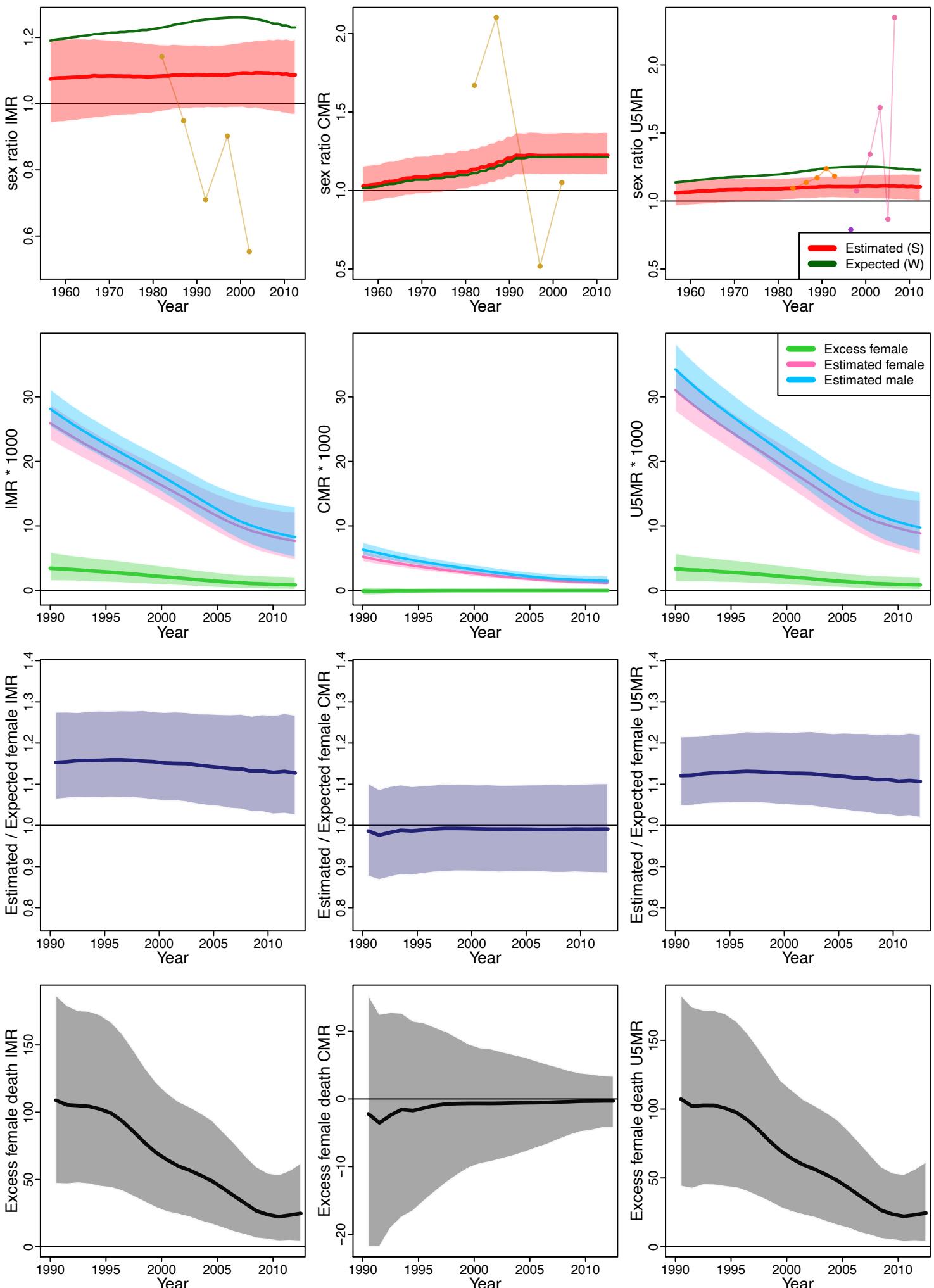
# Lao People's Democratic Republic



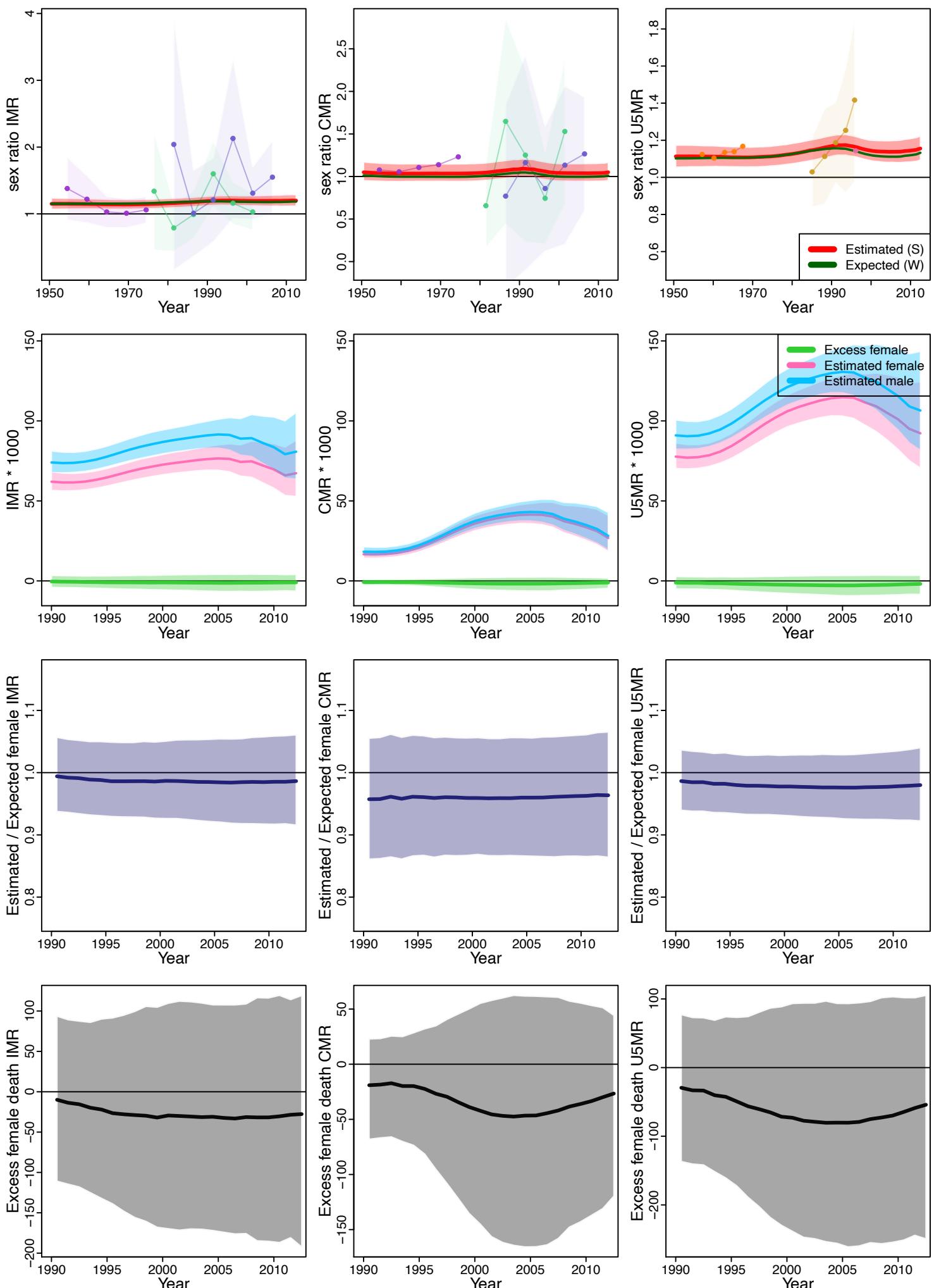
# Latvia



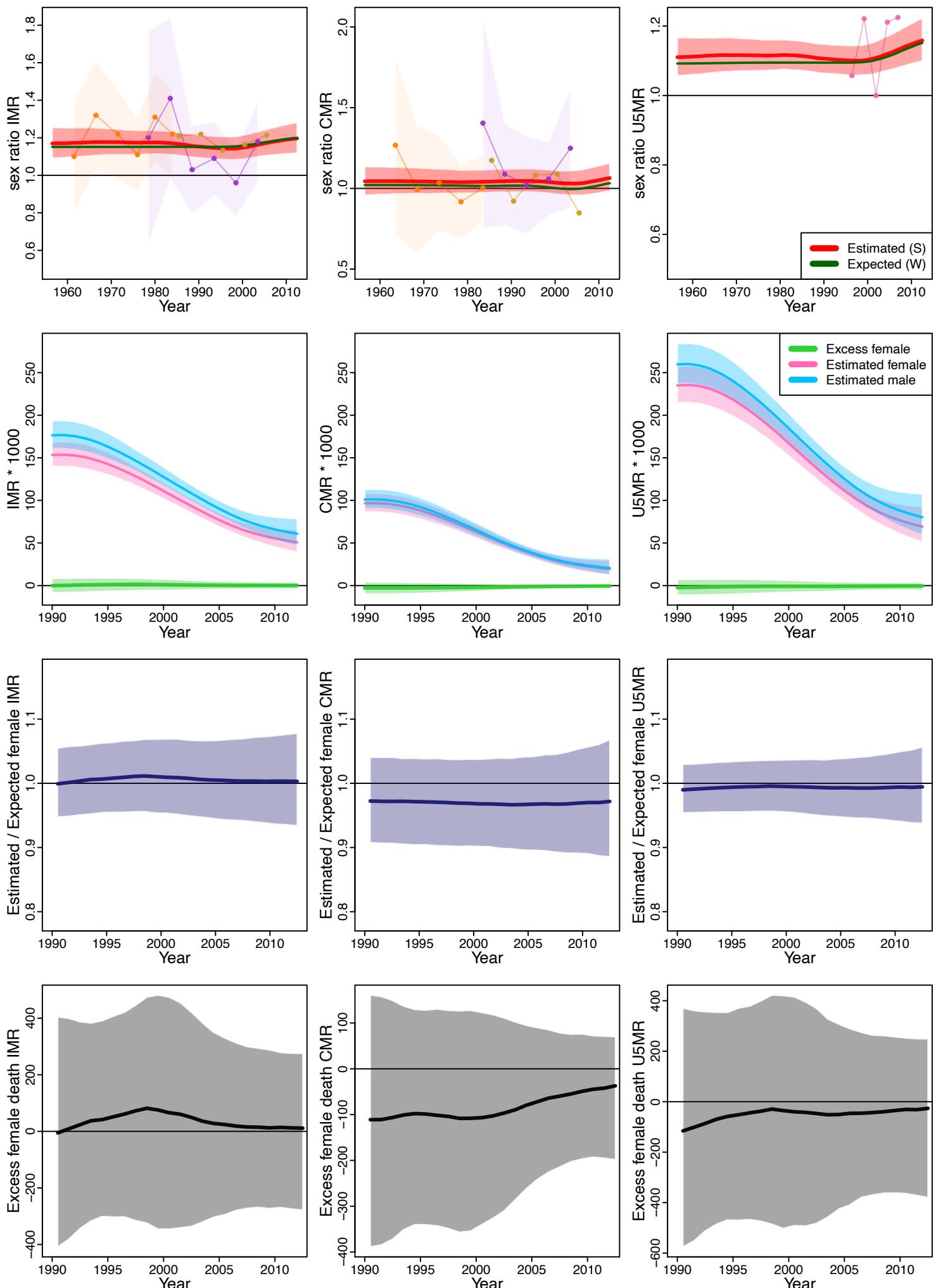
# Lebanon



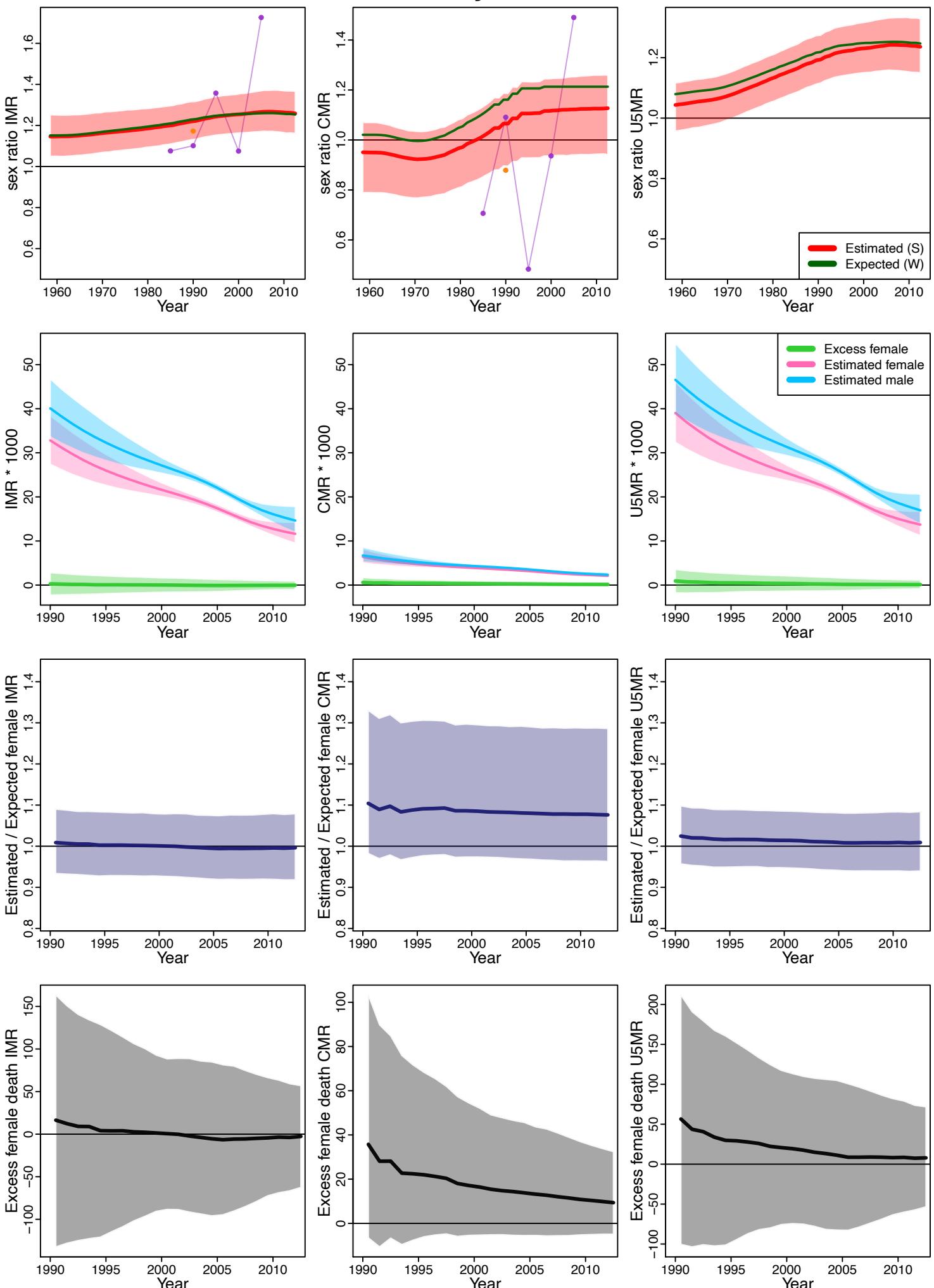
# Lesotho



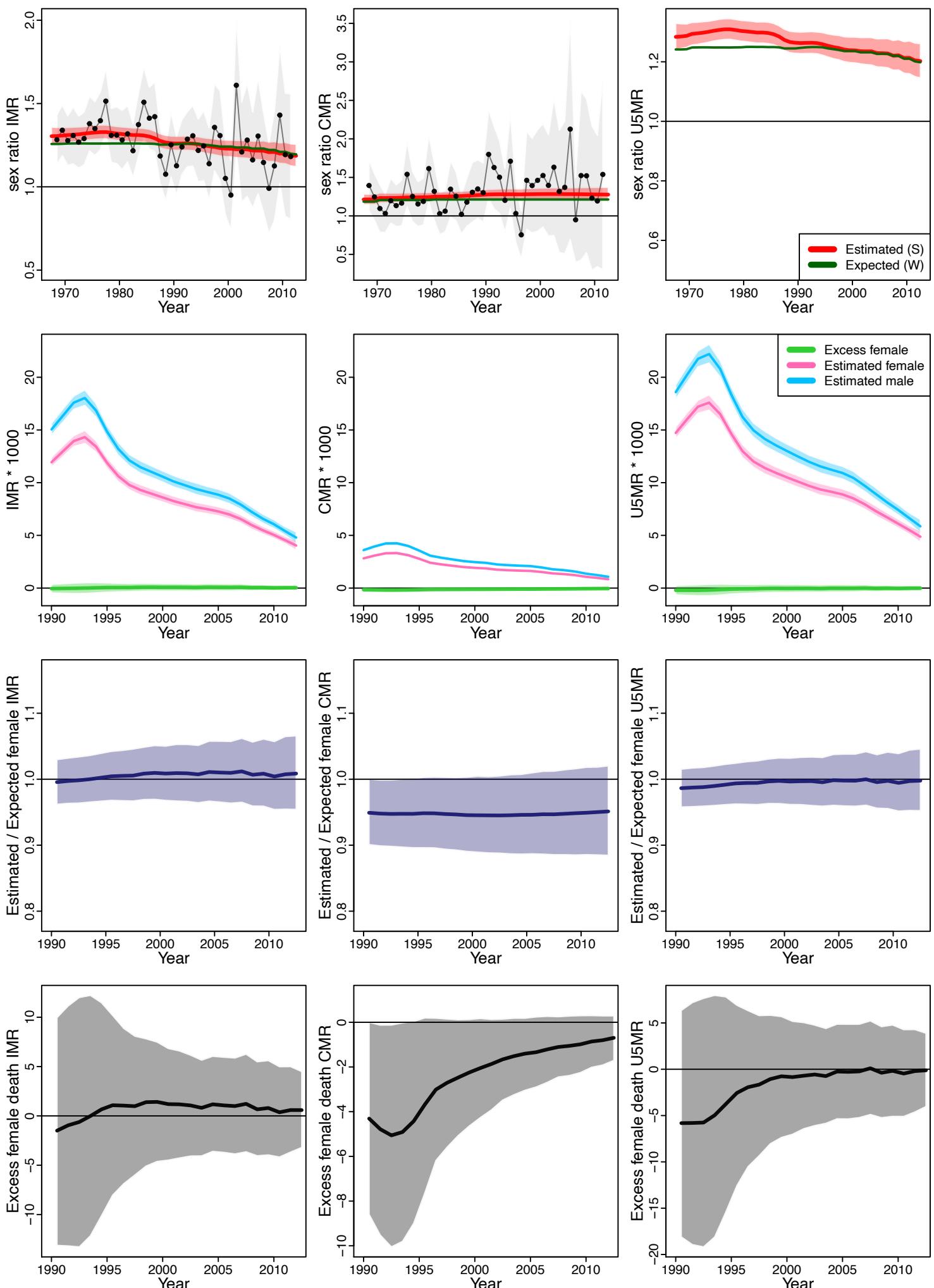
# Liberia



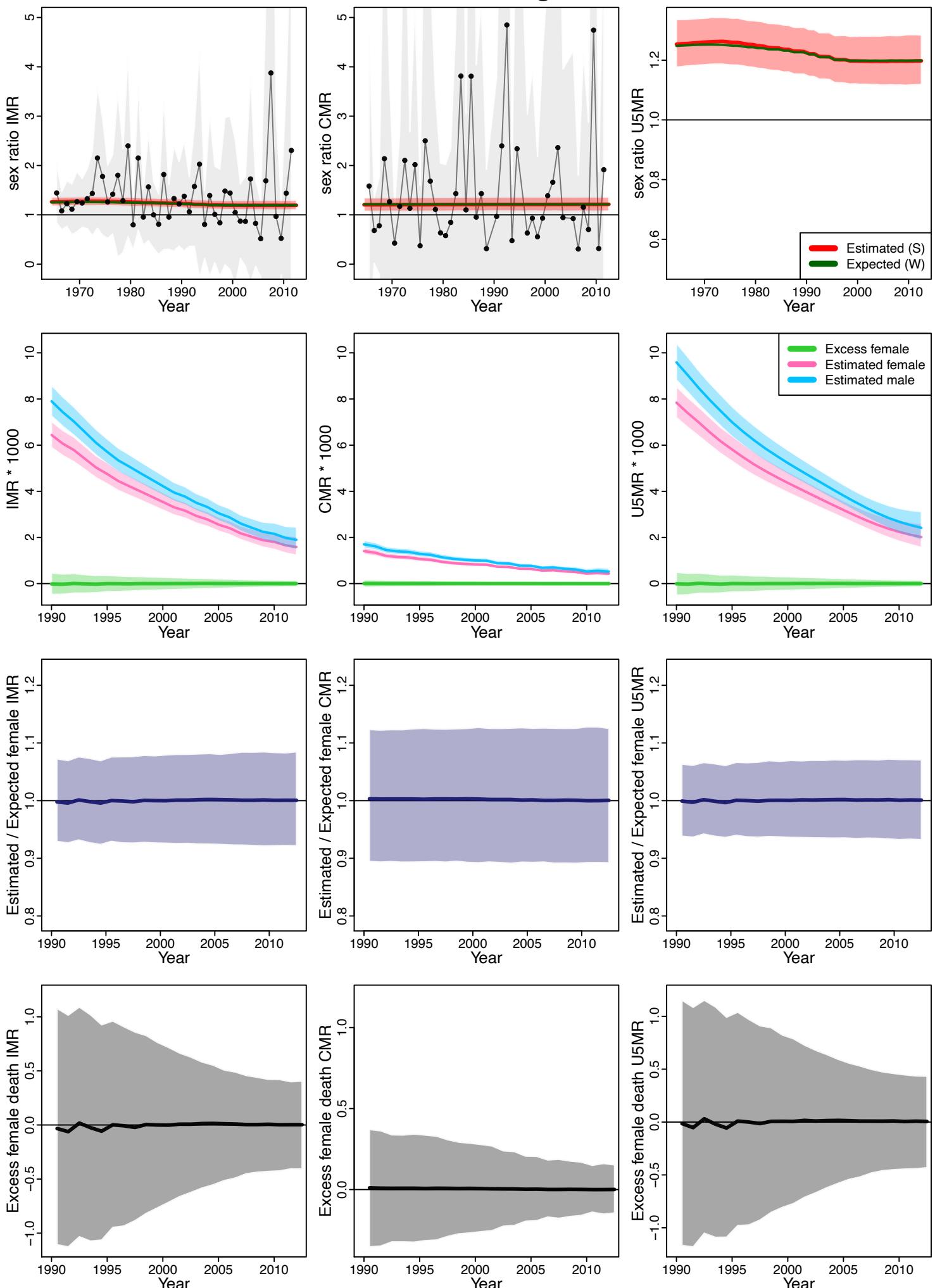
# Libya



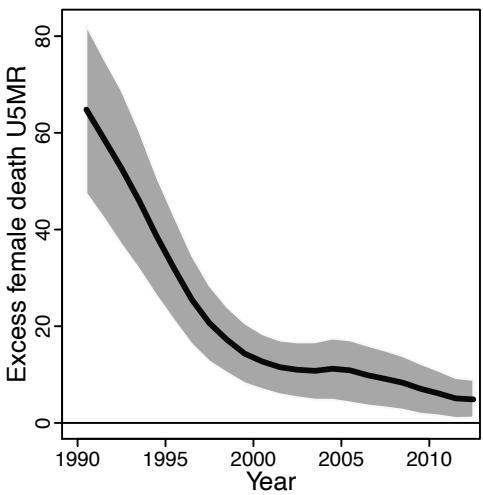
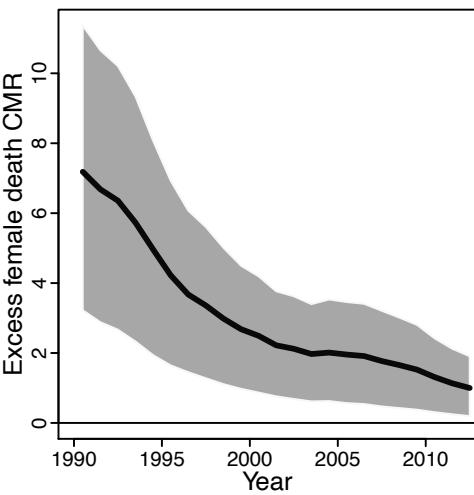
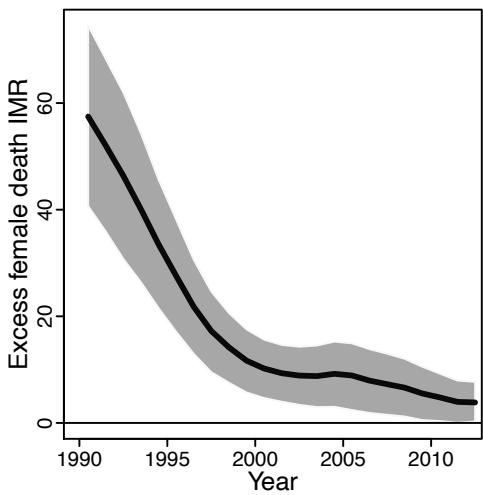
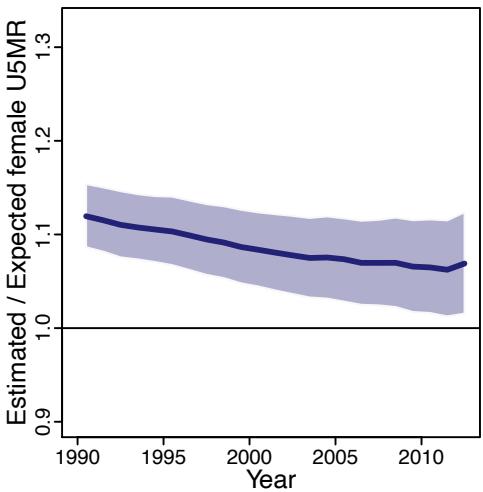
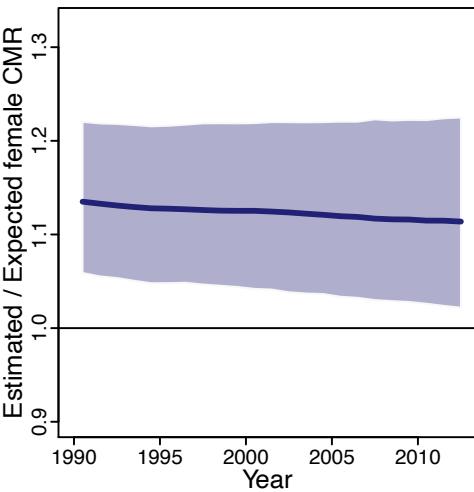
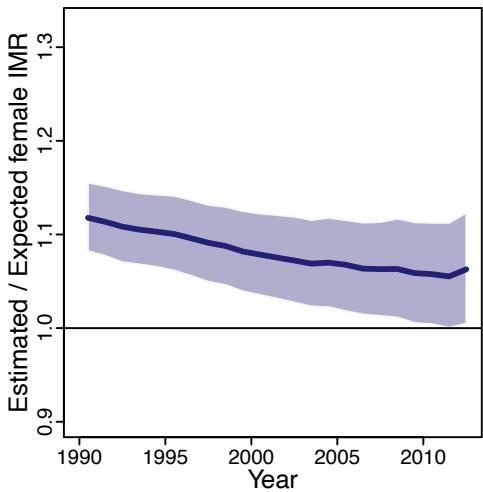
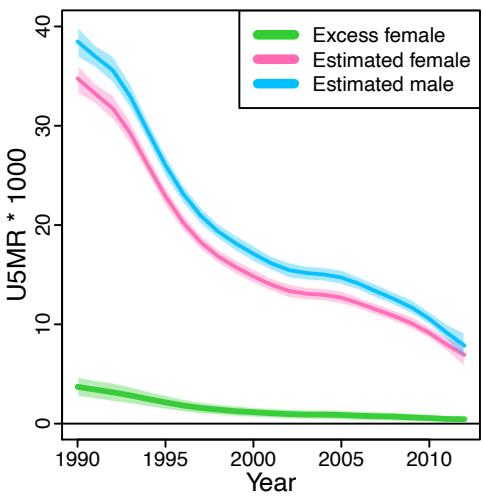
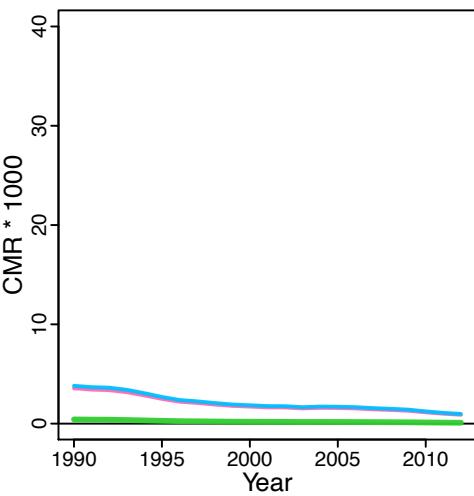
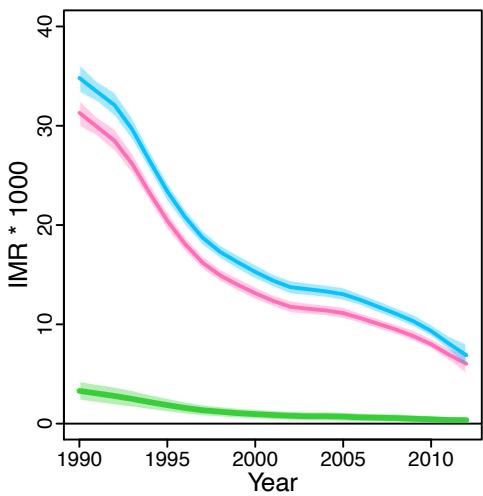
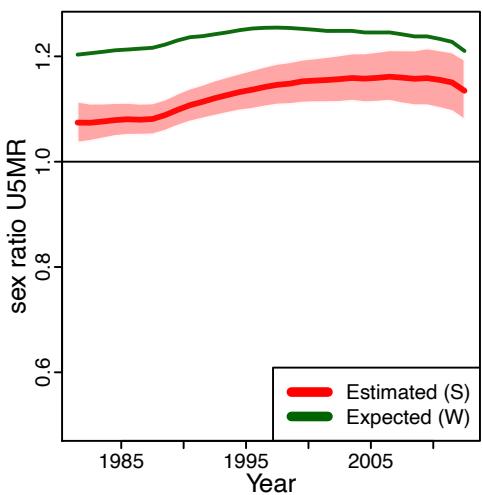
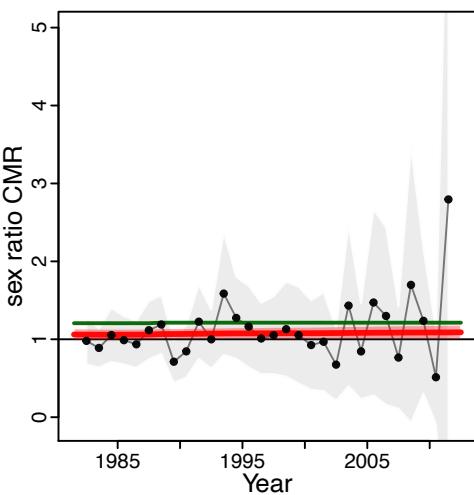
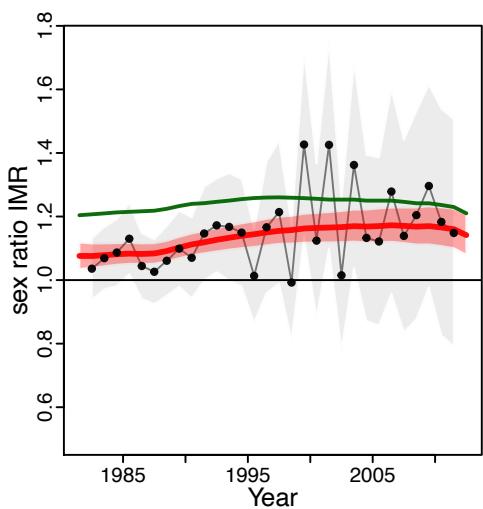
# Lithuania



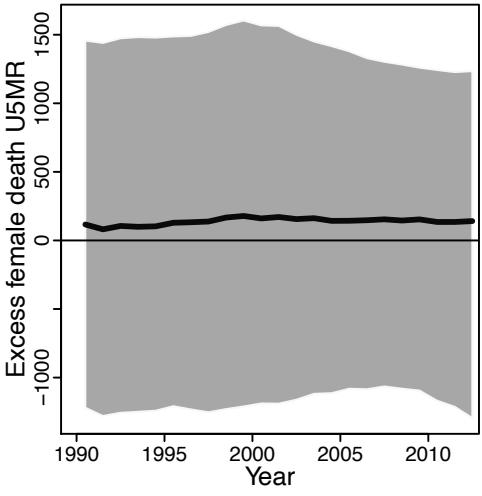
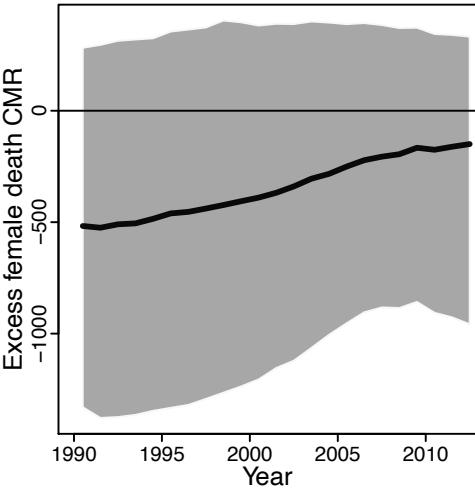
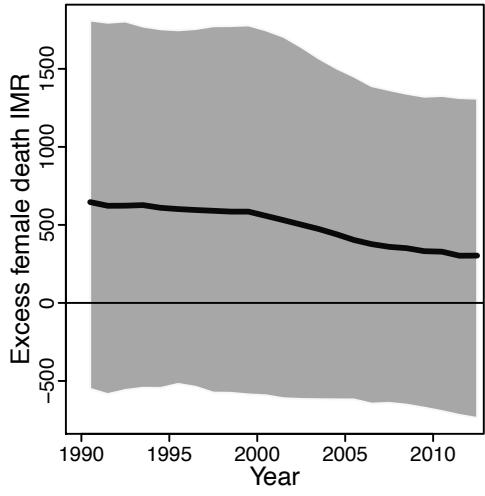
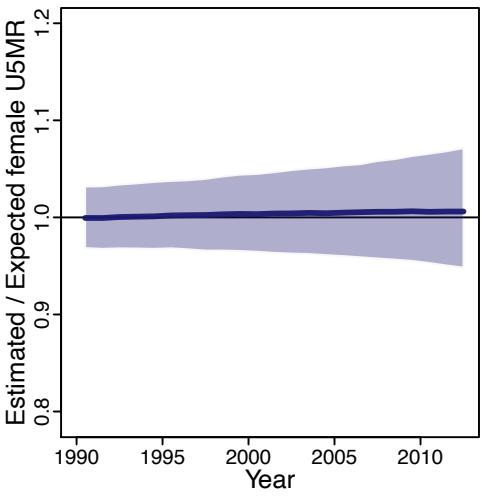
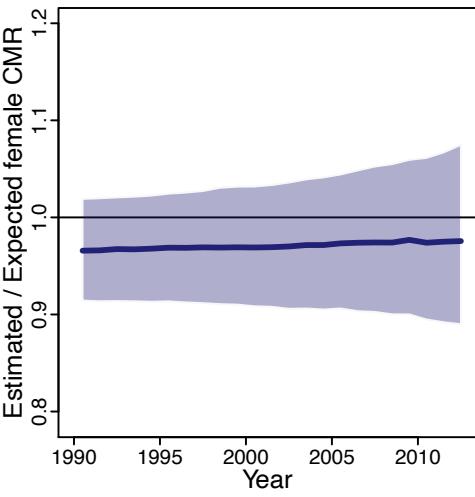
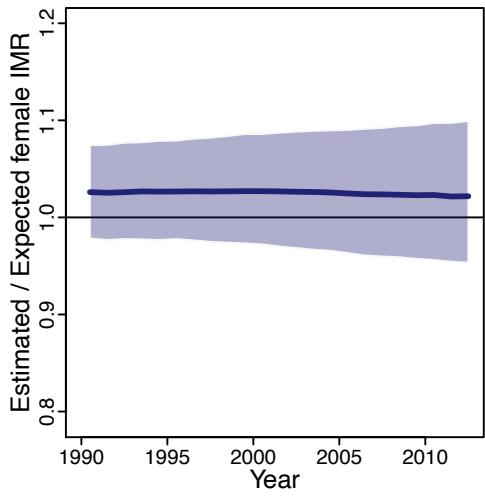
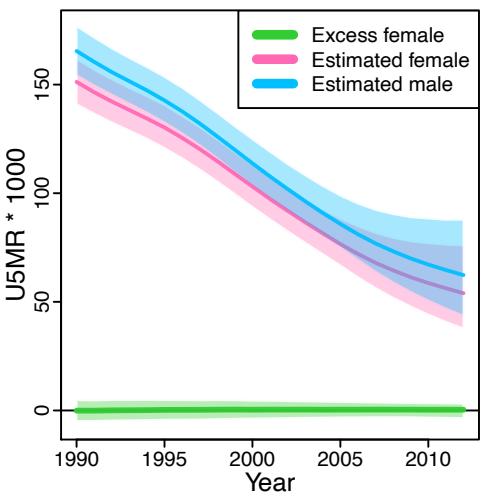
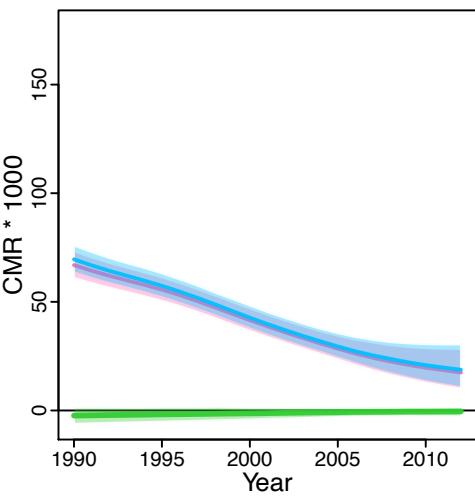
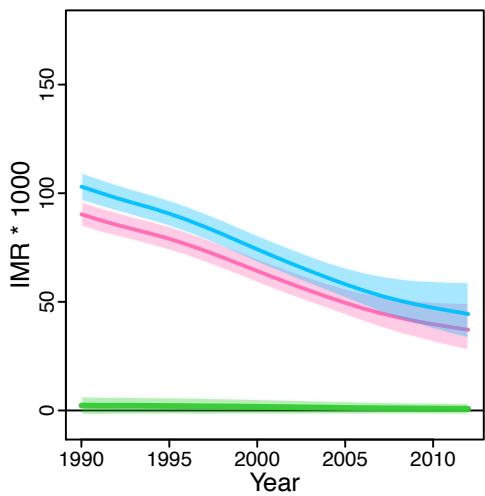
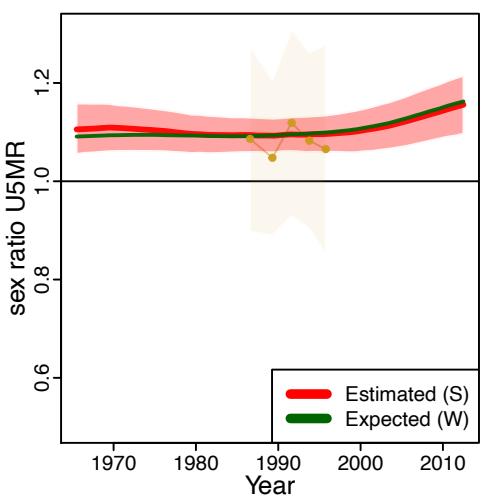
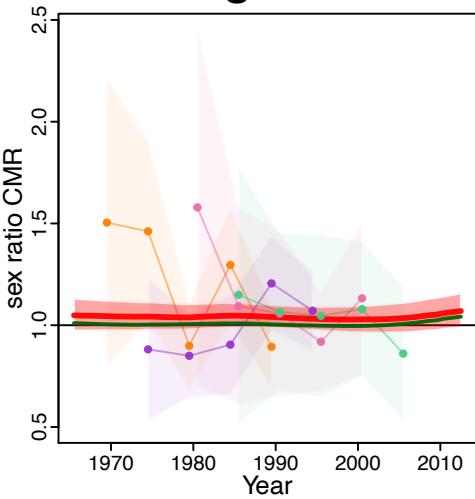
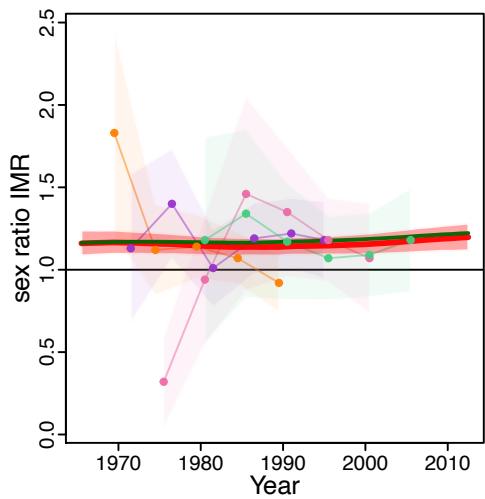
# Luxembourg



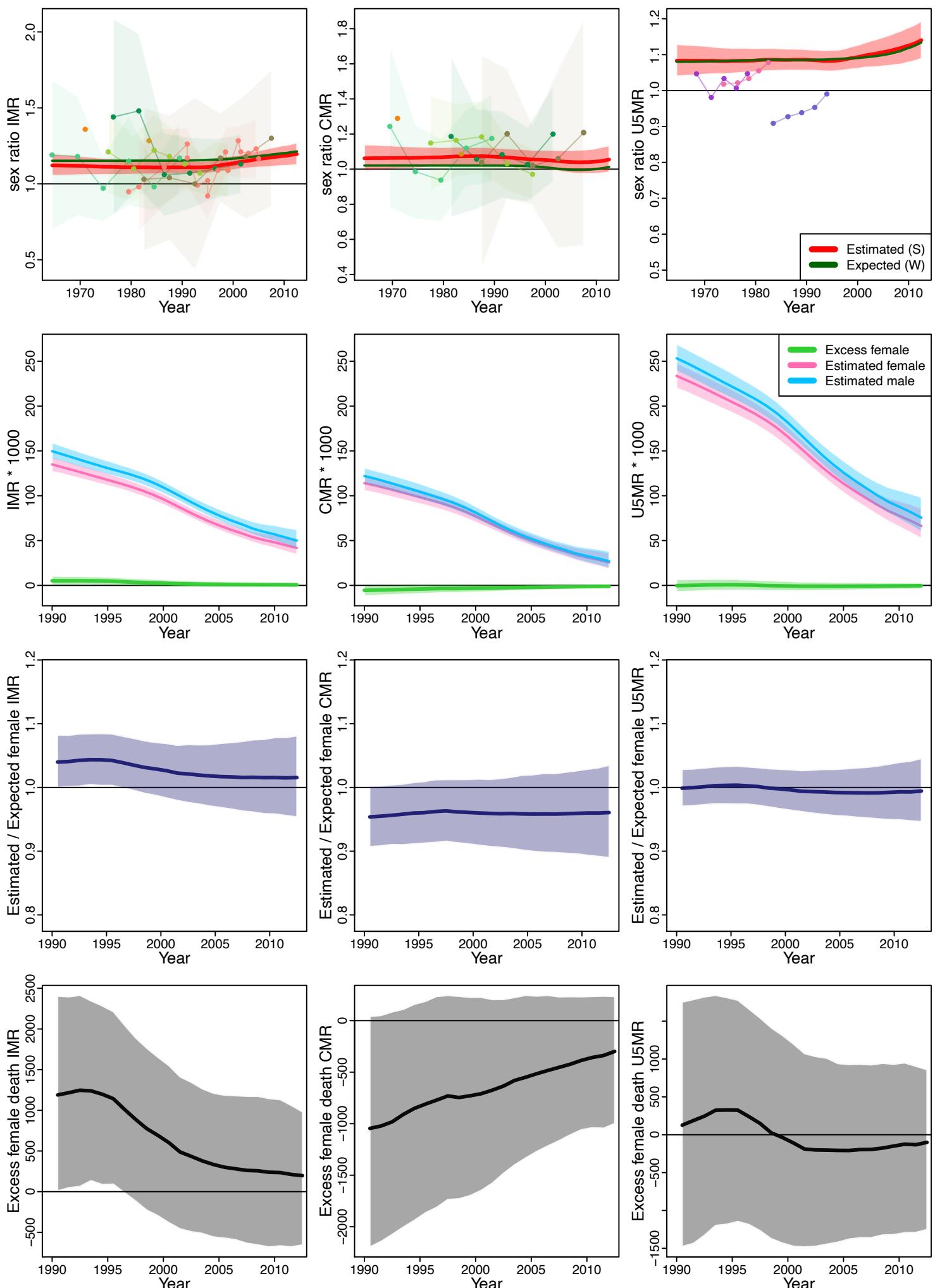
# Macedonia



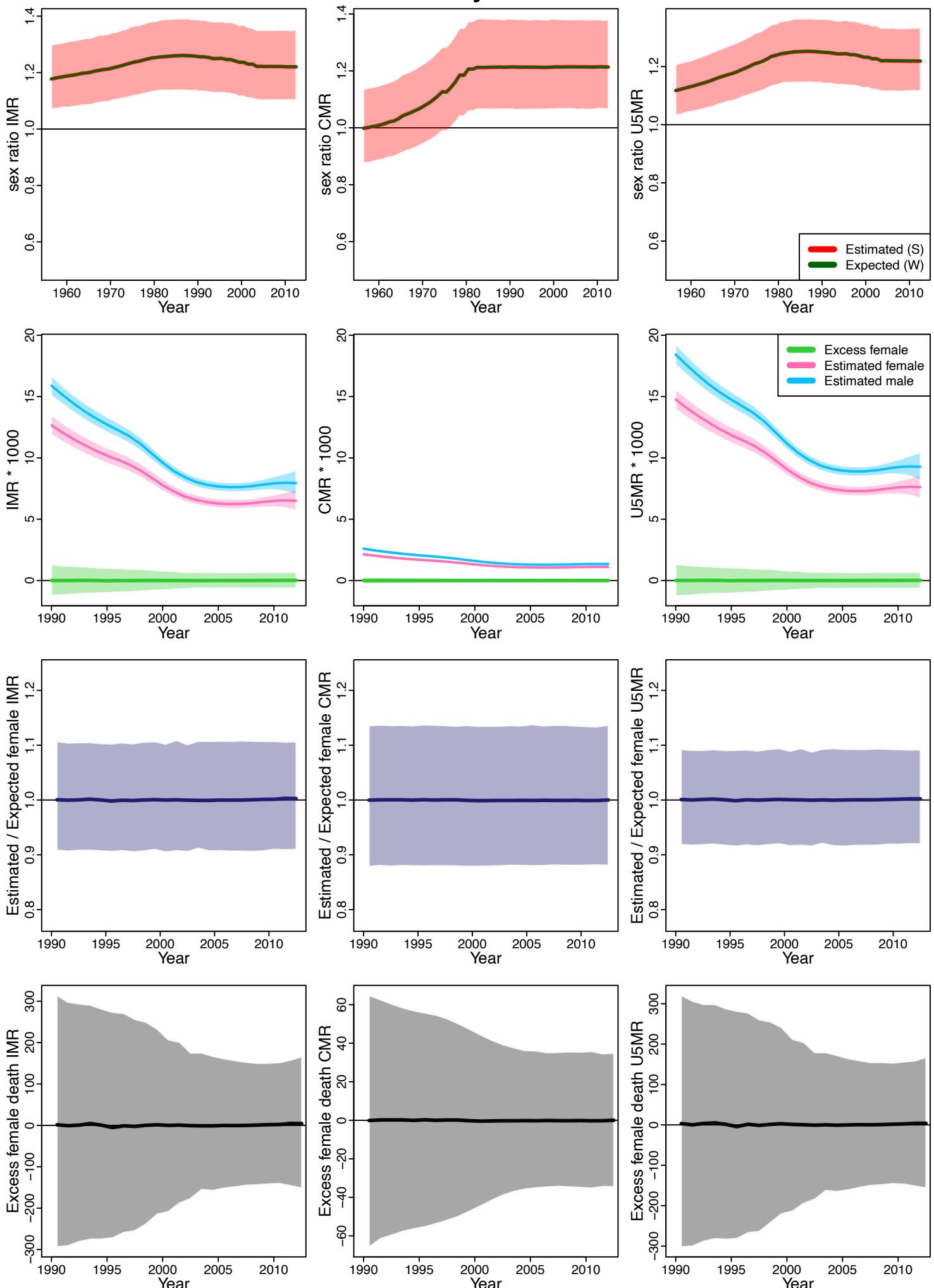
# Madagascar



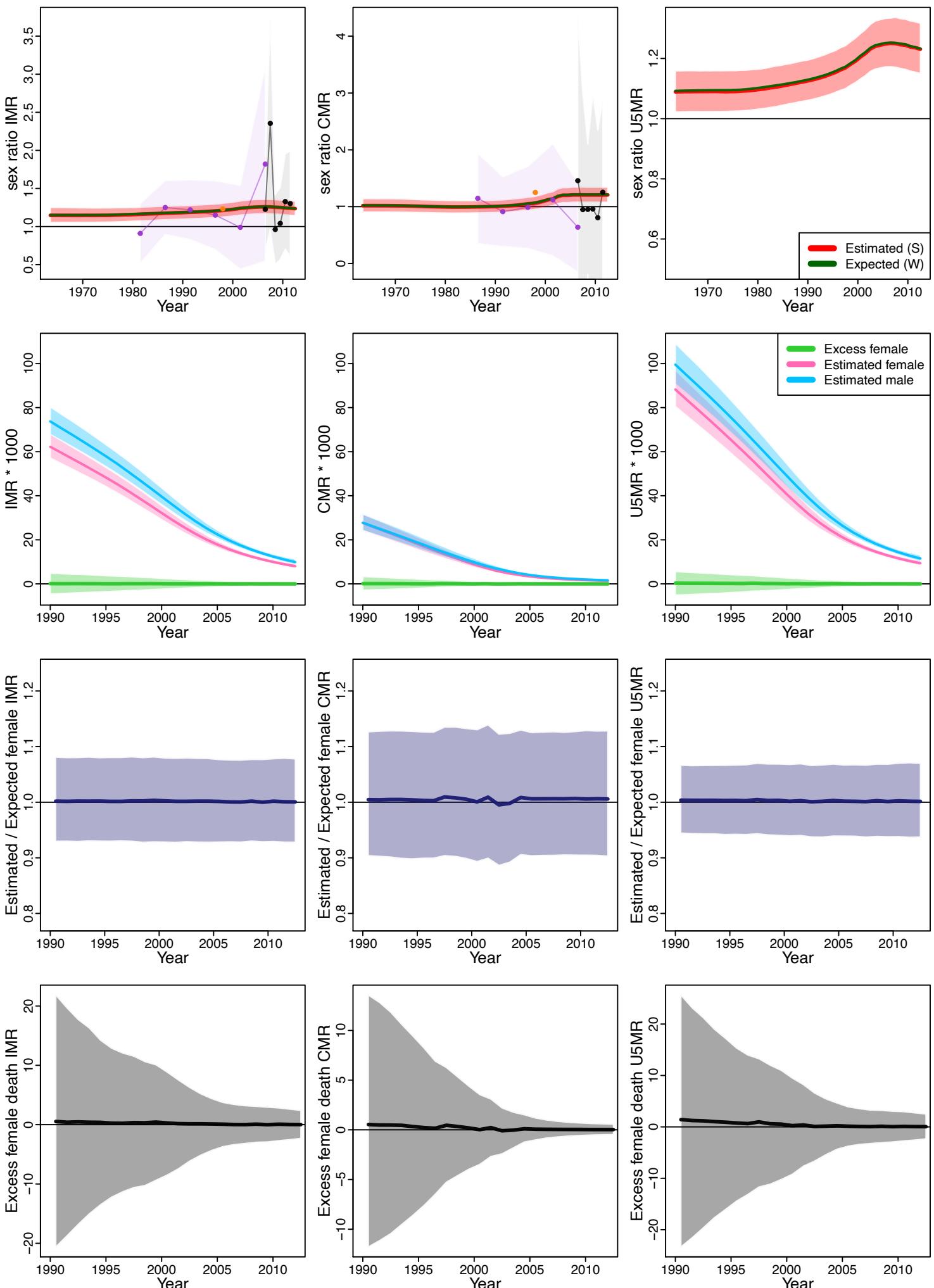
# Malawi



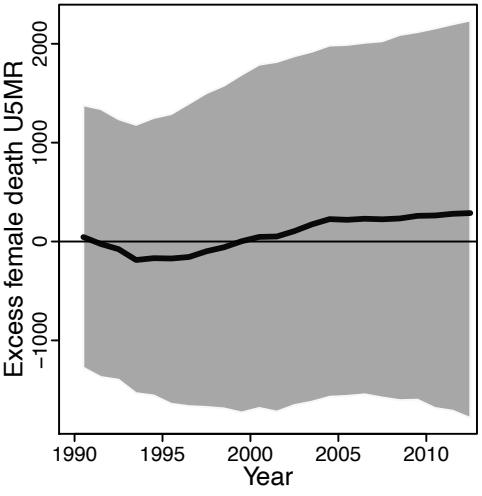
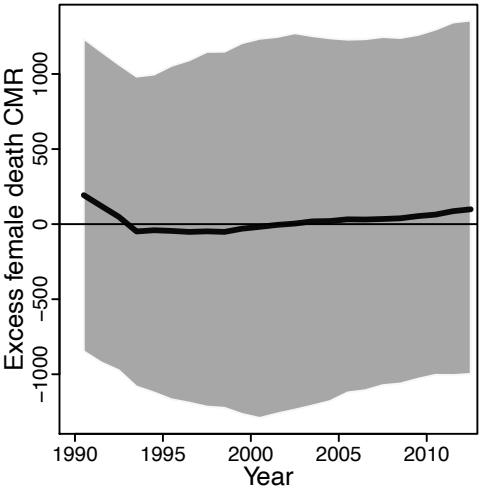
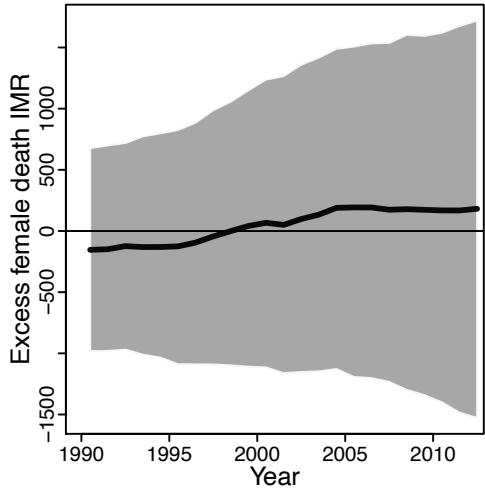
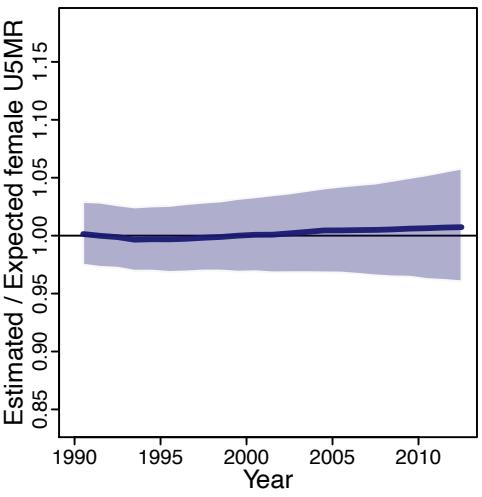
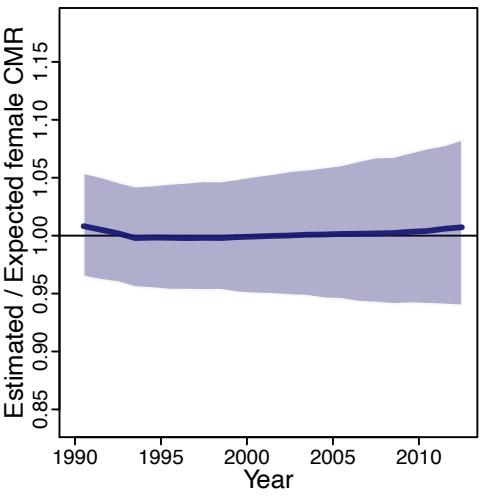
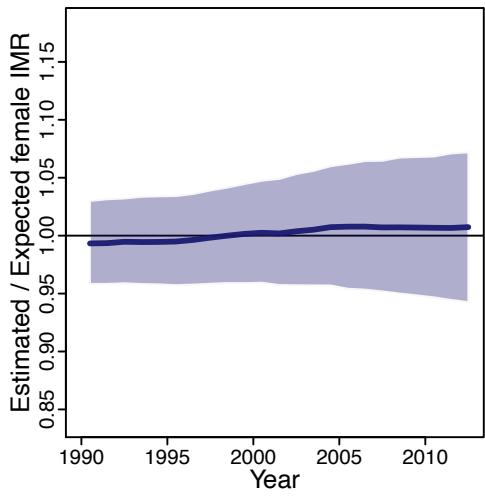
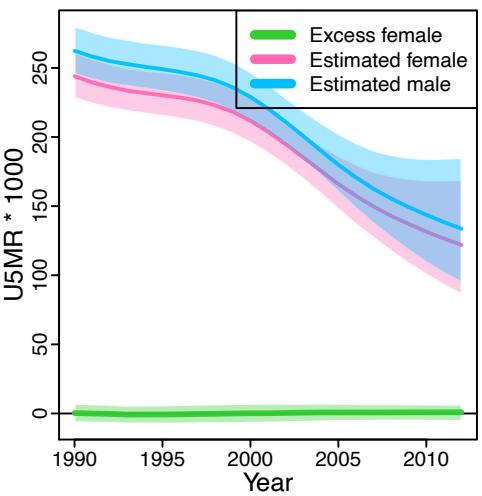
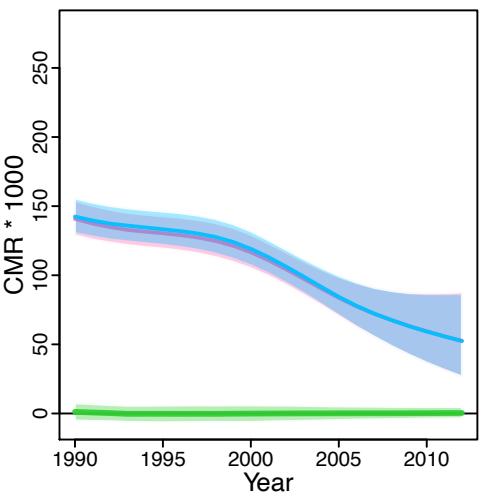
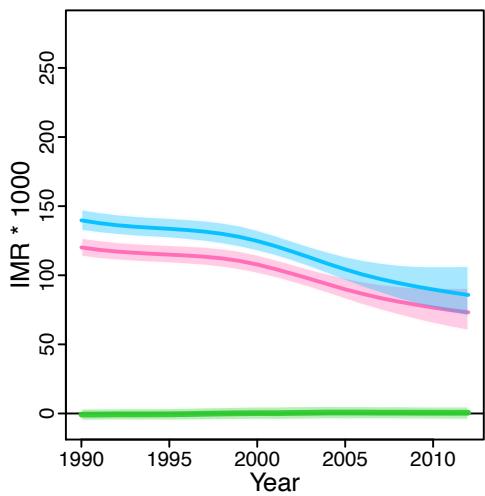
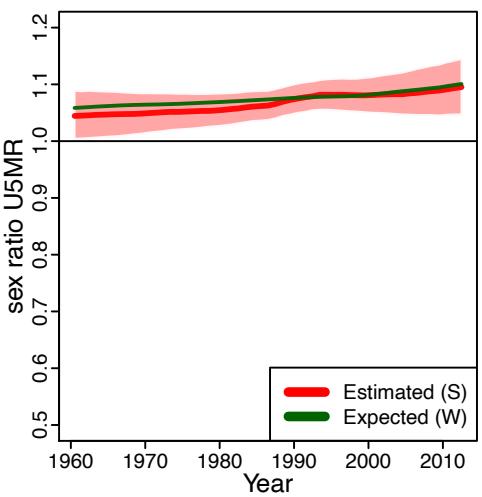
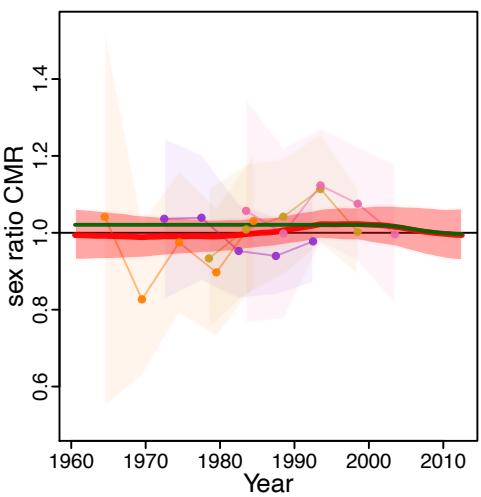
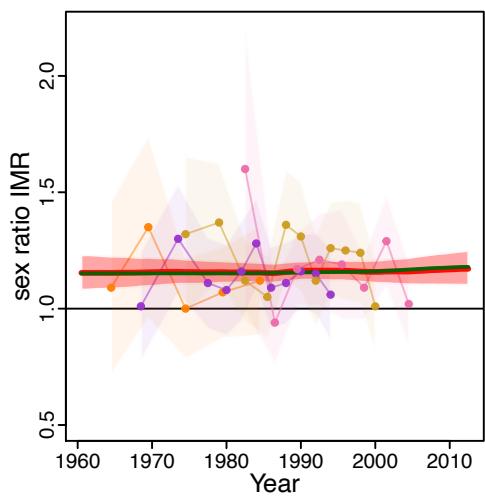
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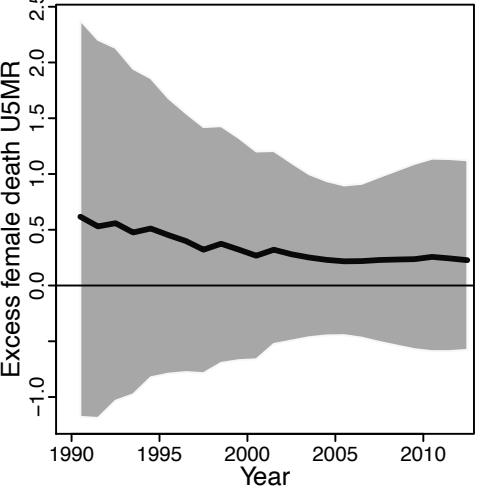
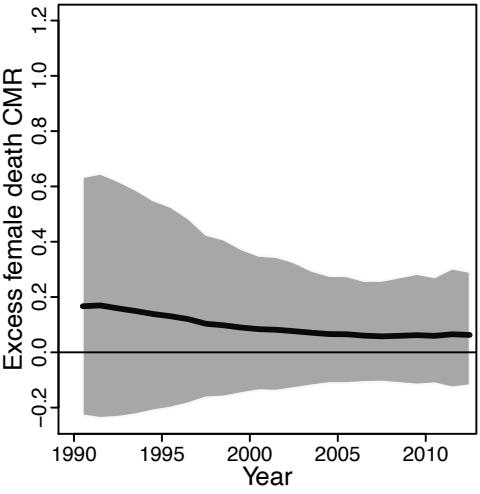
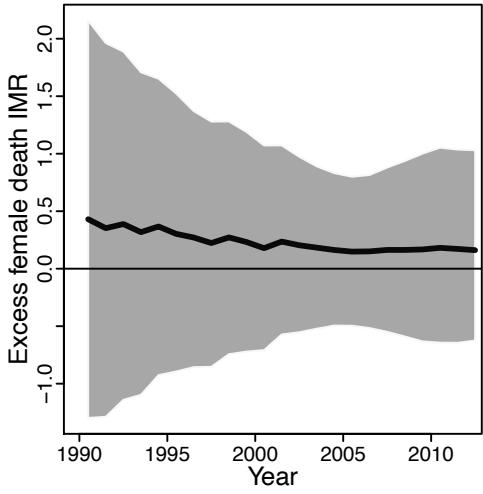
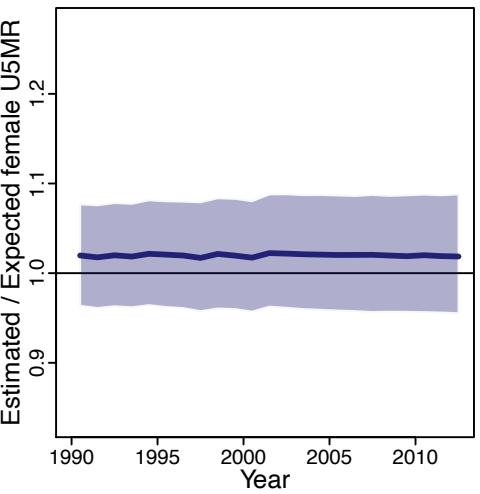
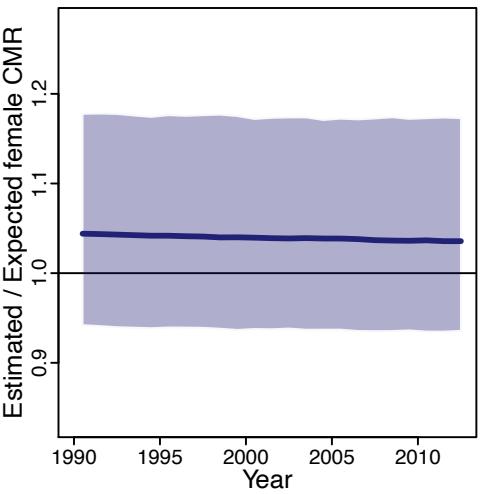
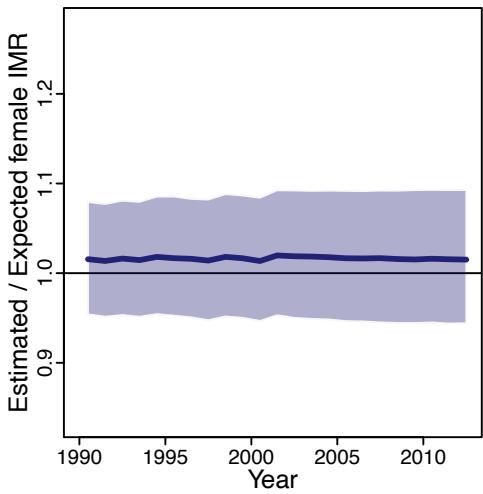
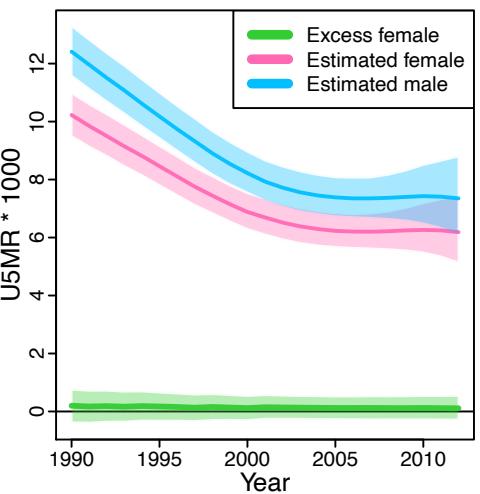
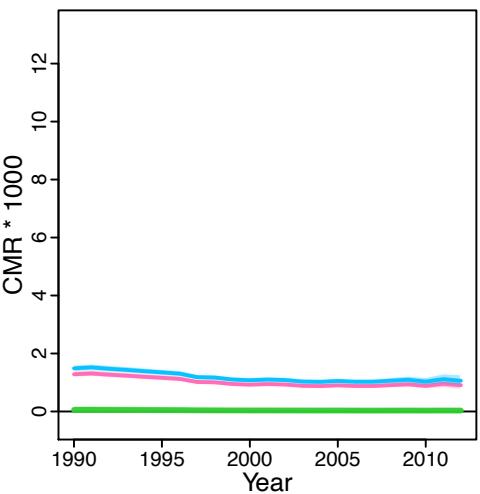
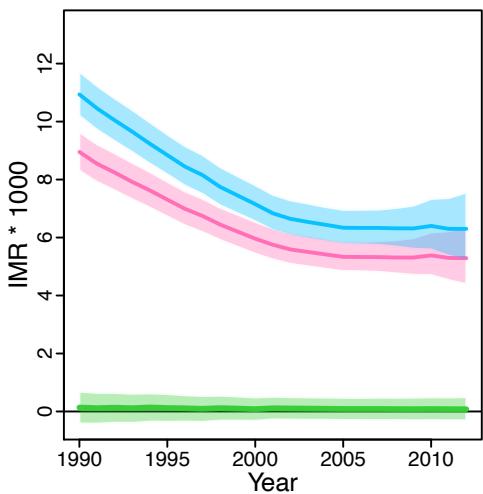
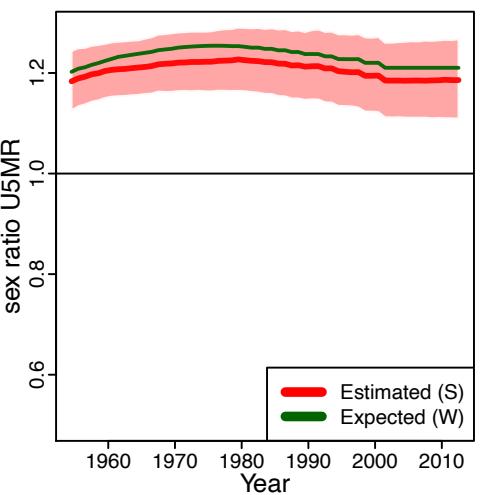
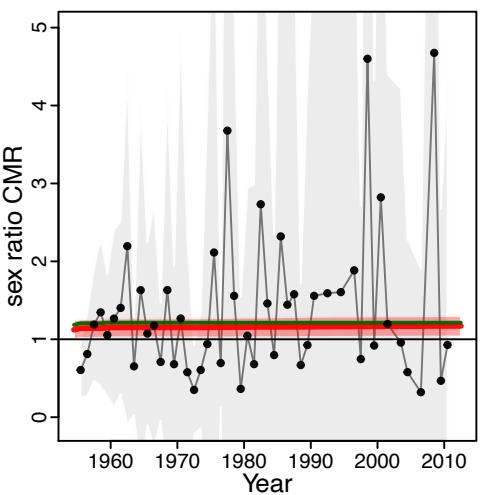
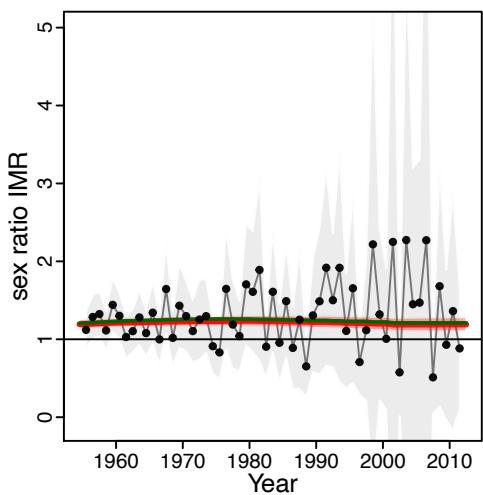
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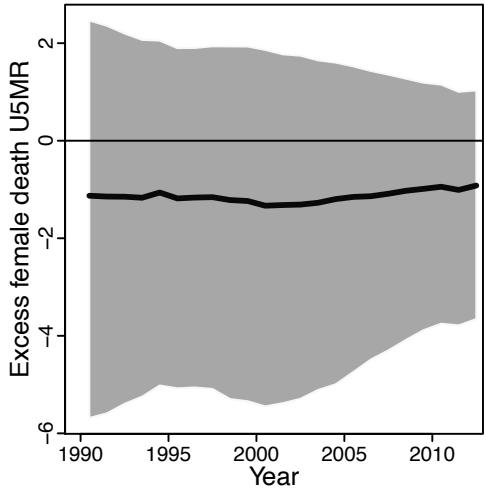
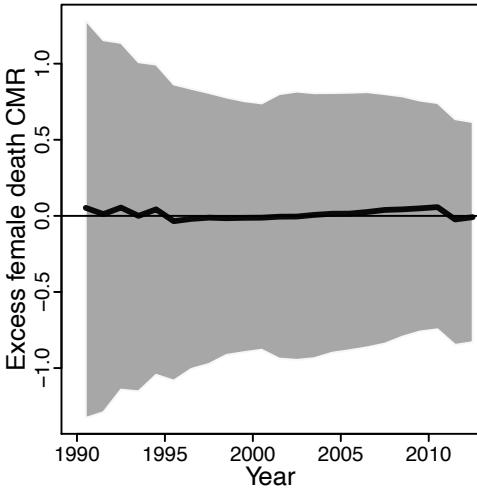
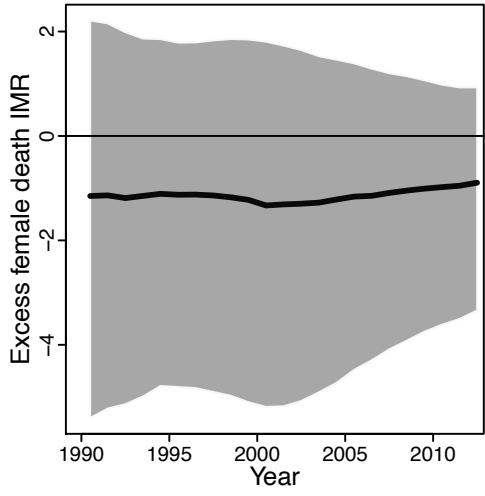
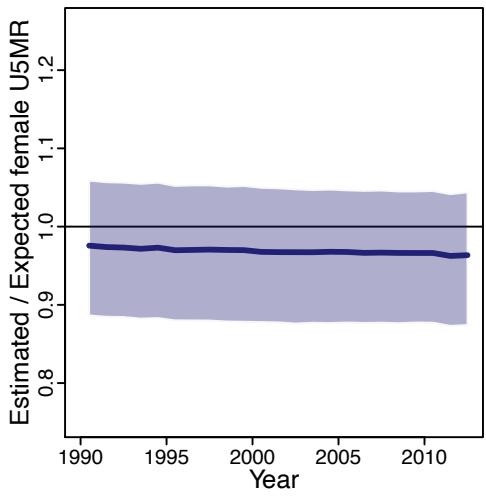
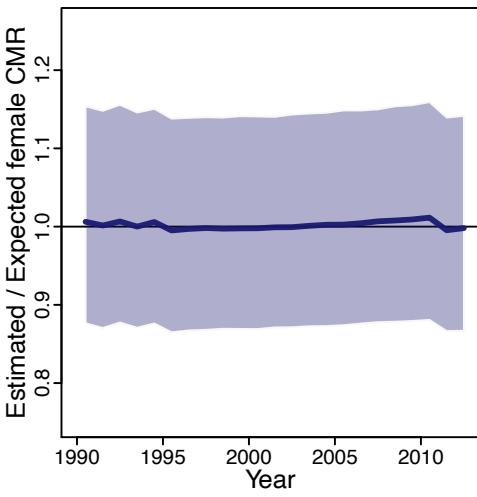
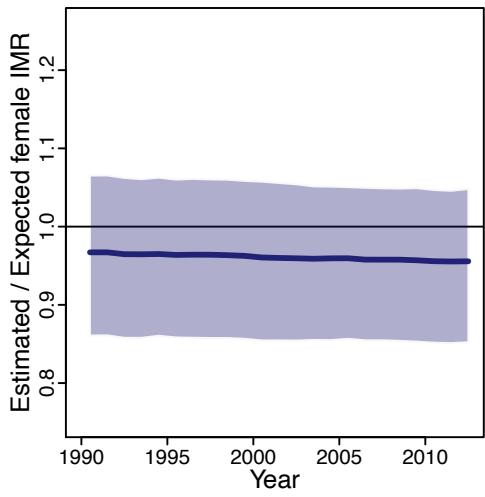
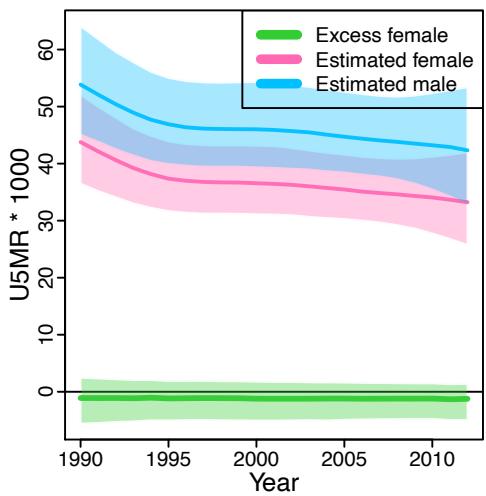
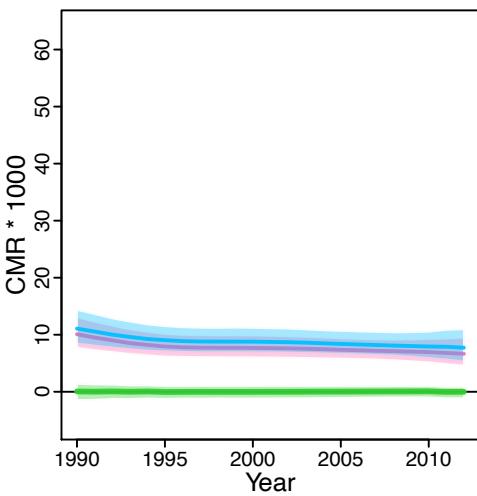
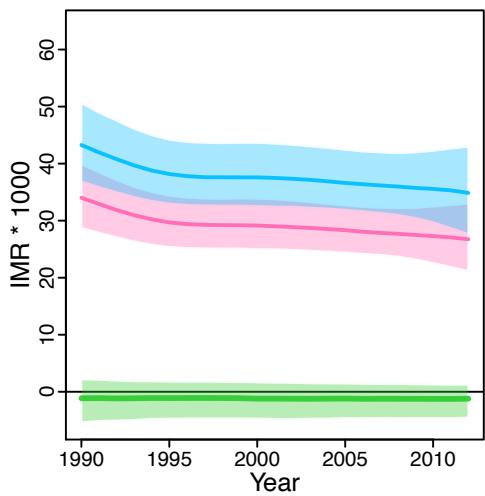
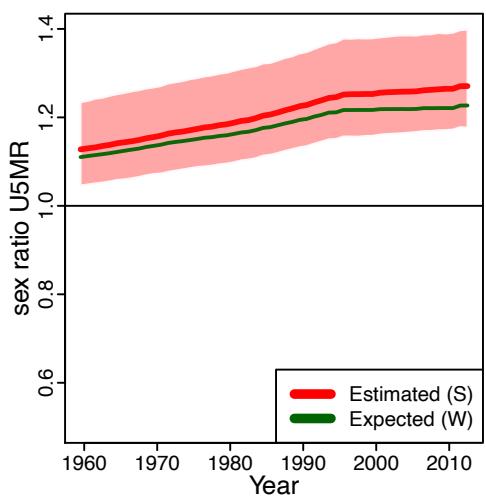
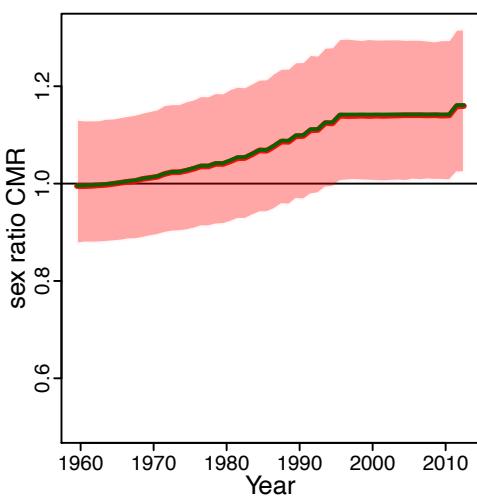
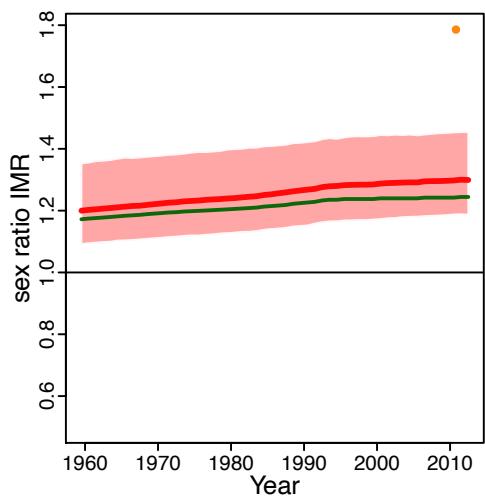
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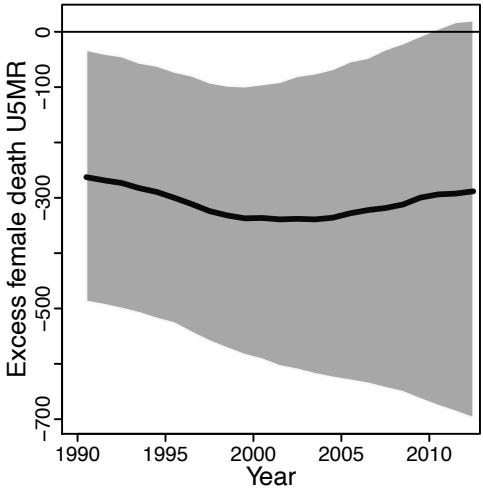
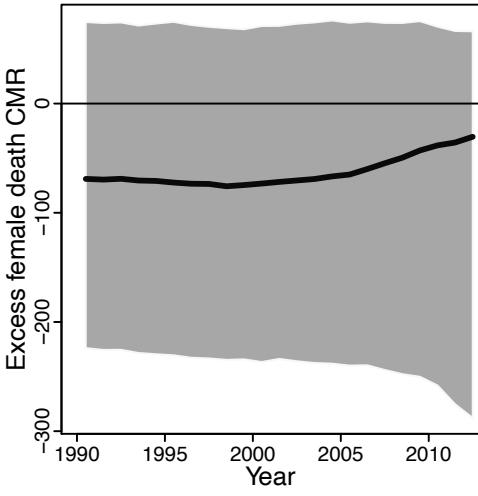
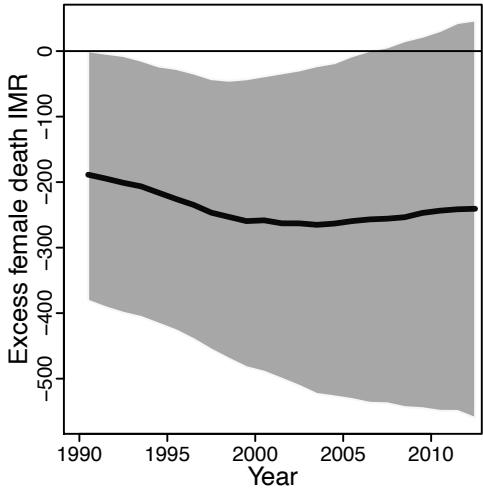
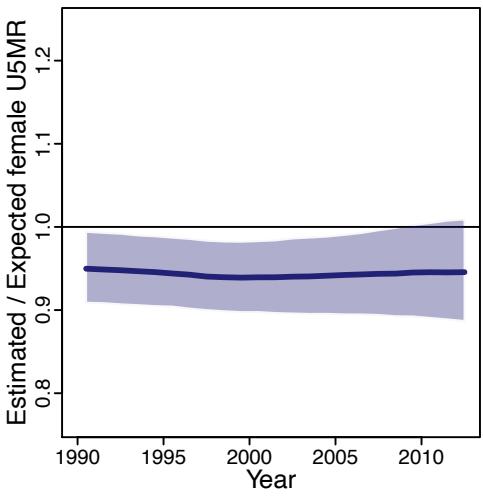
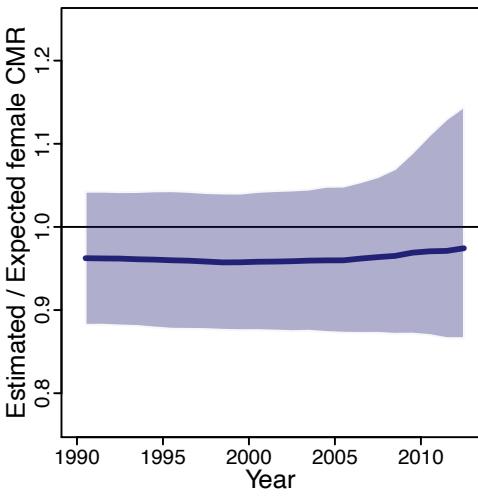
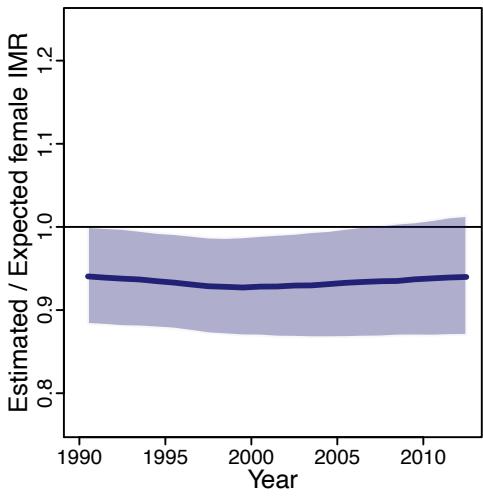
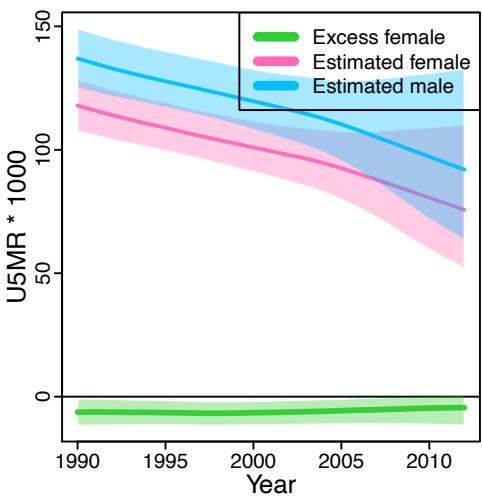
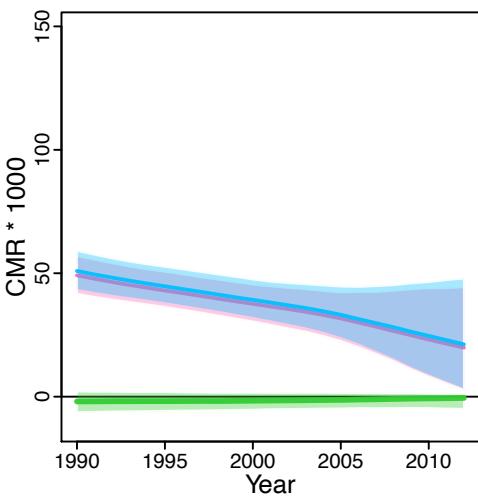
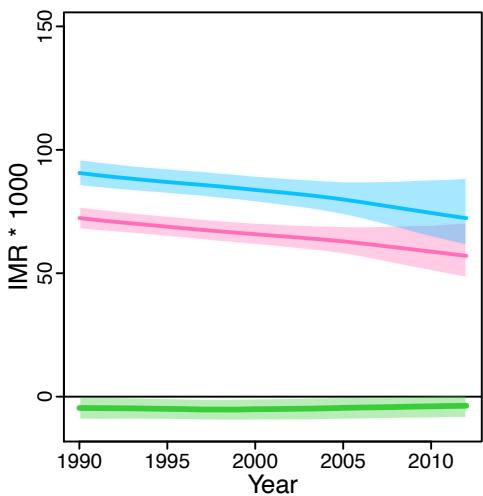
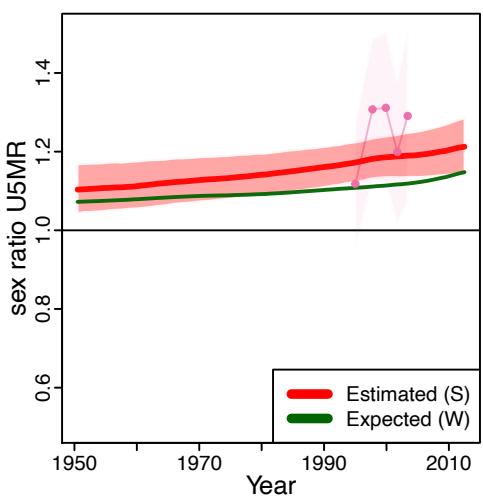
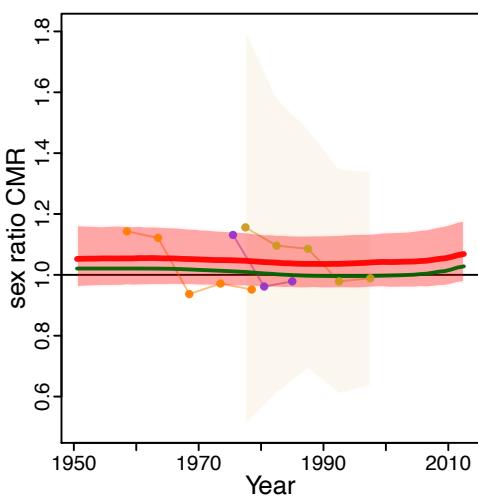
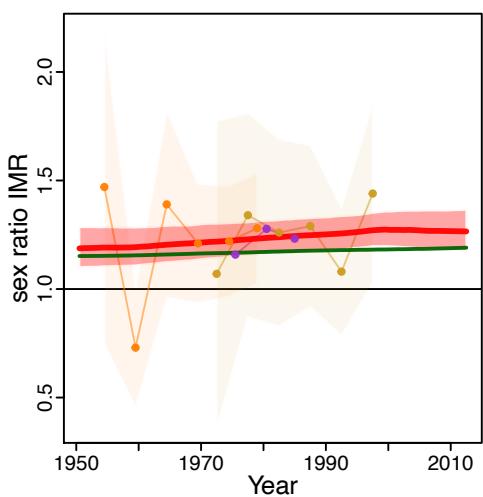
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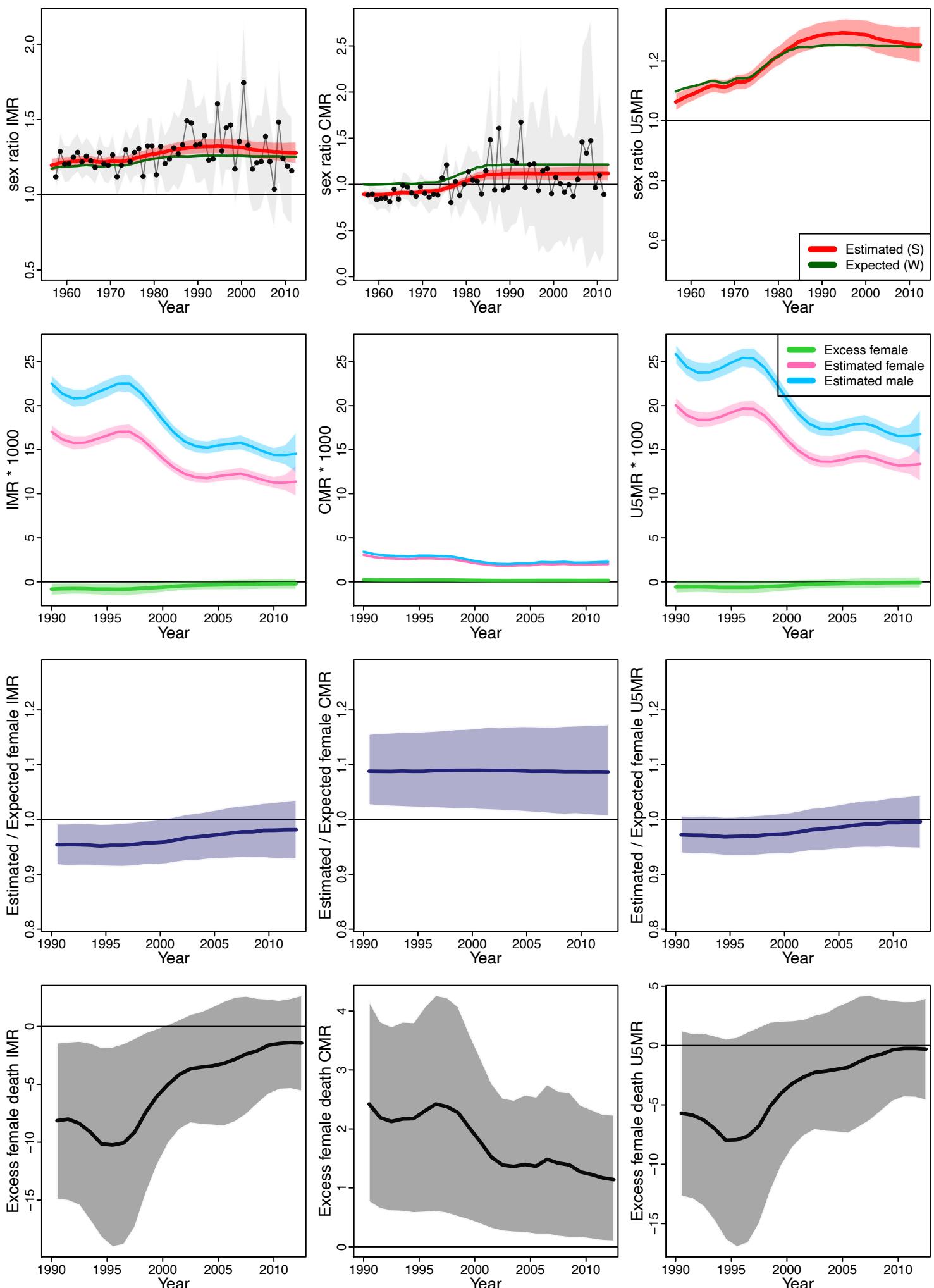
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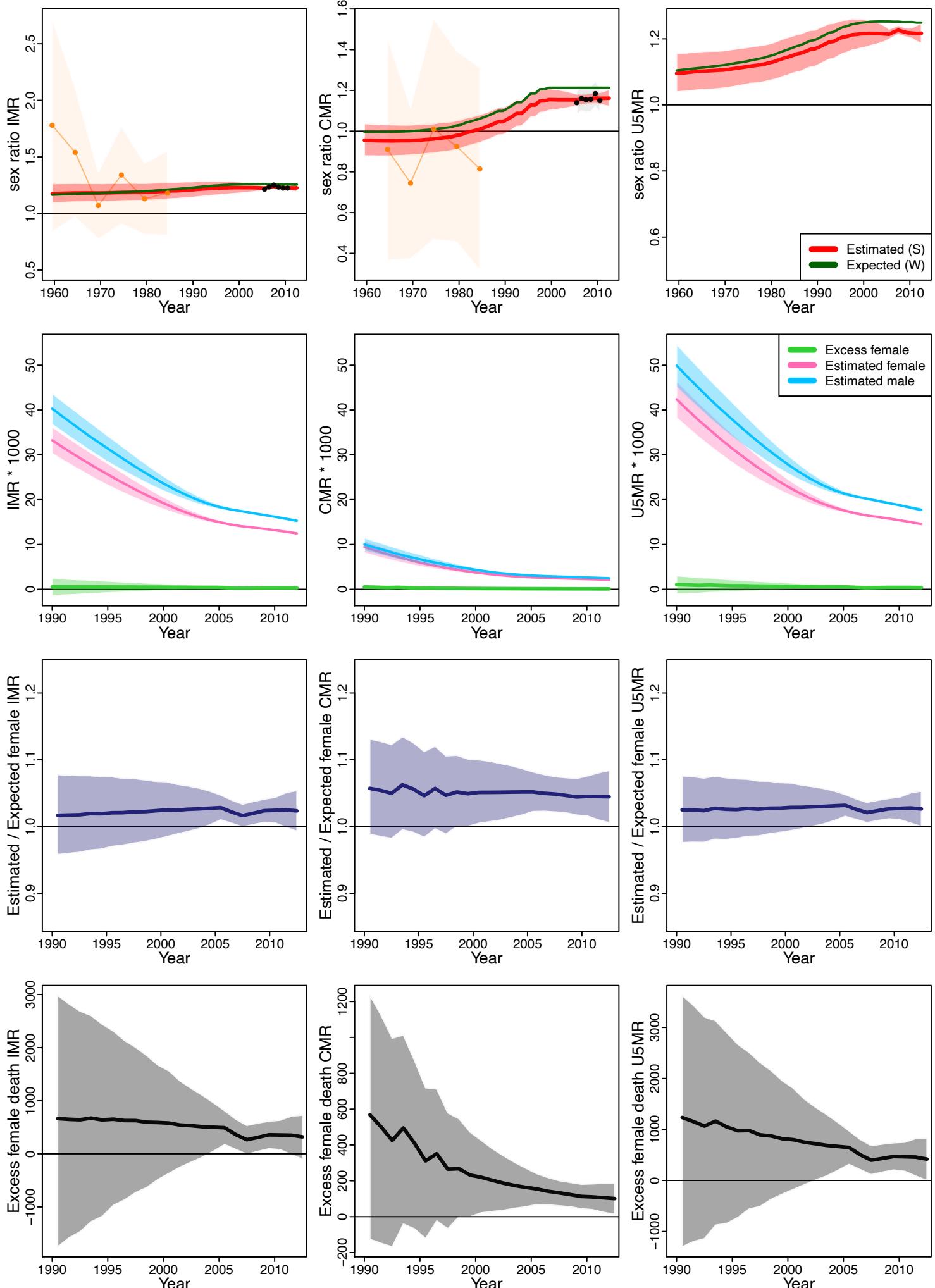
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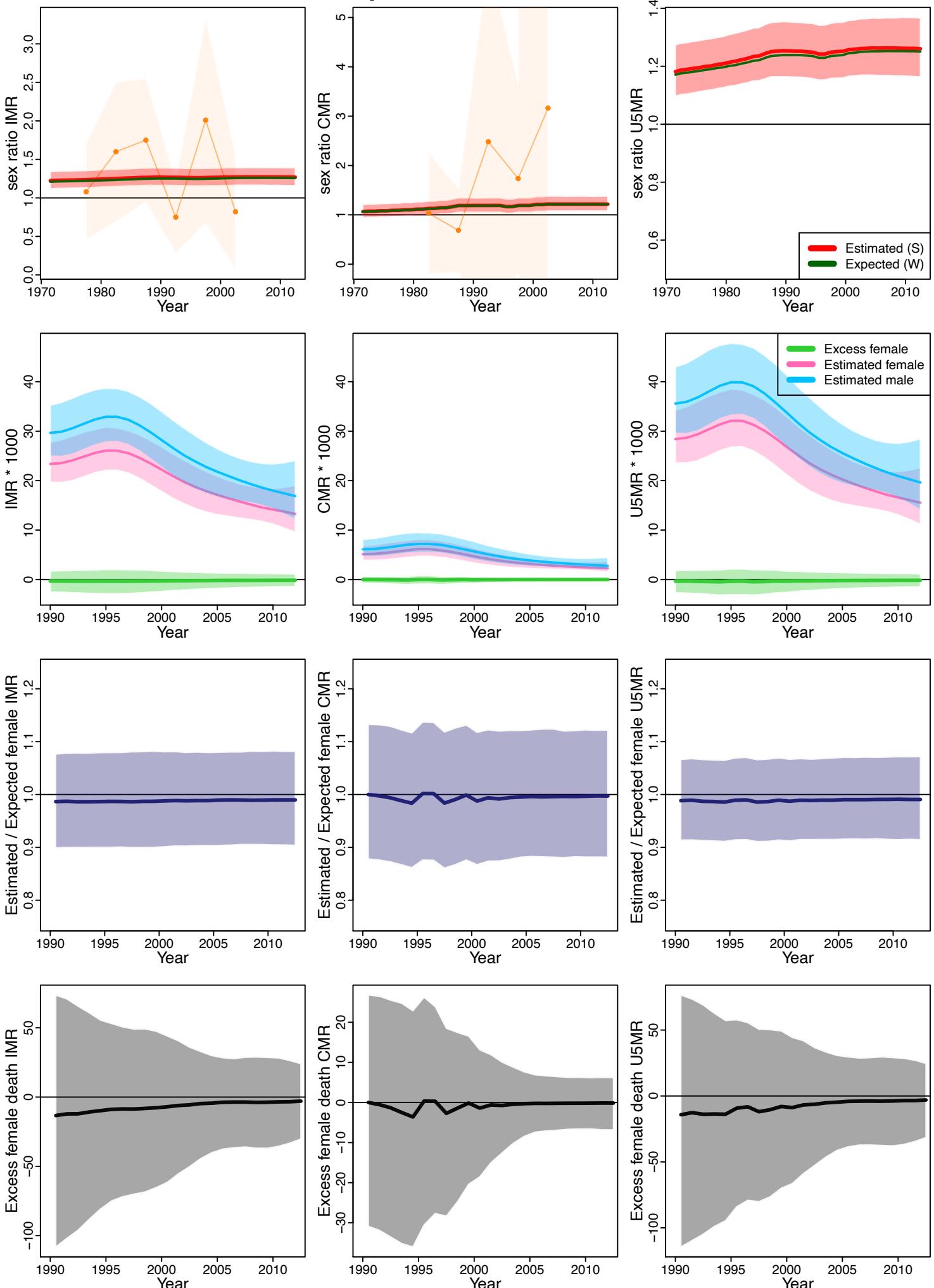
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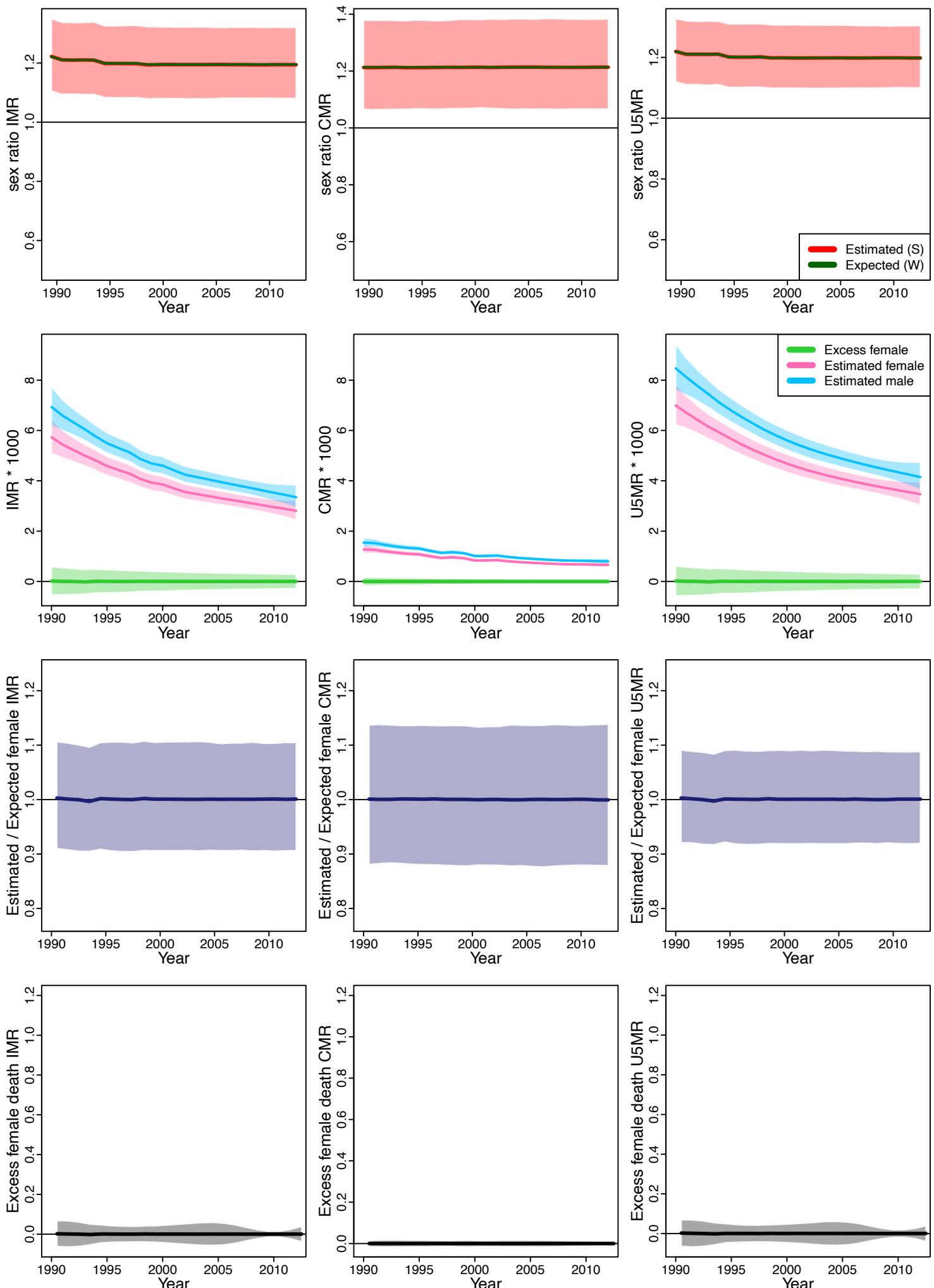
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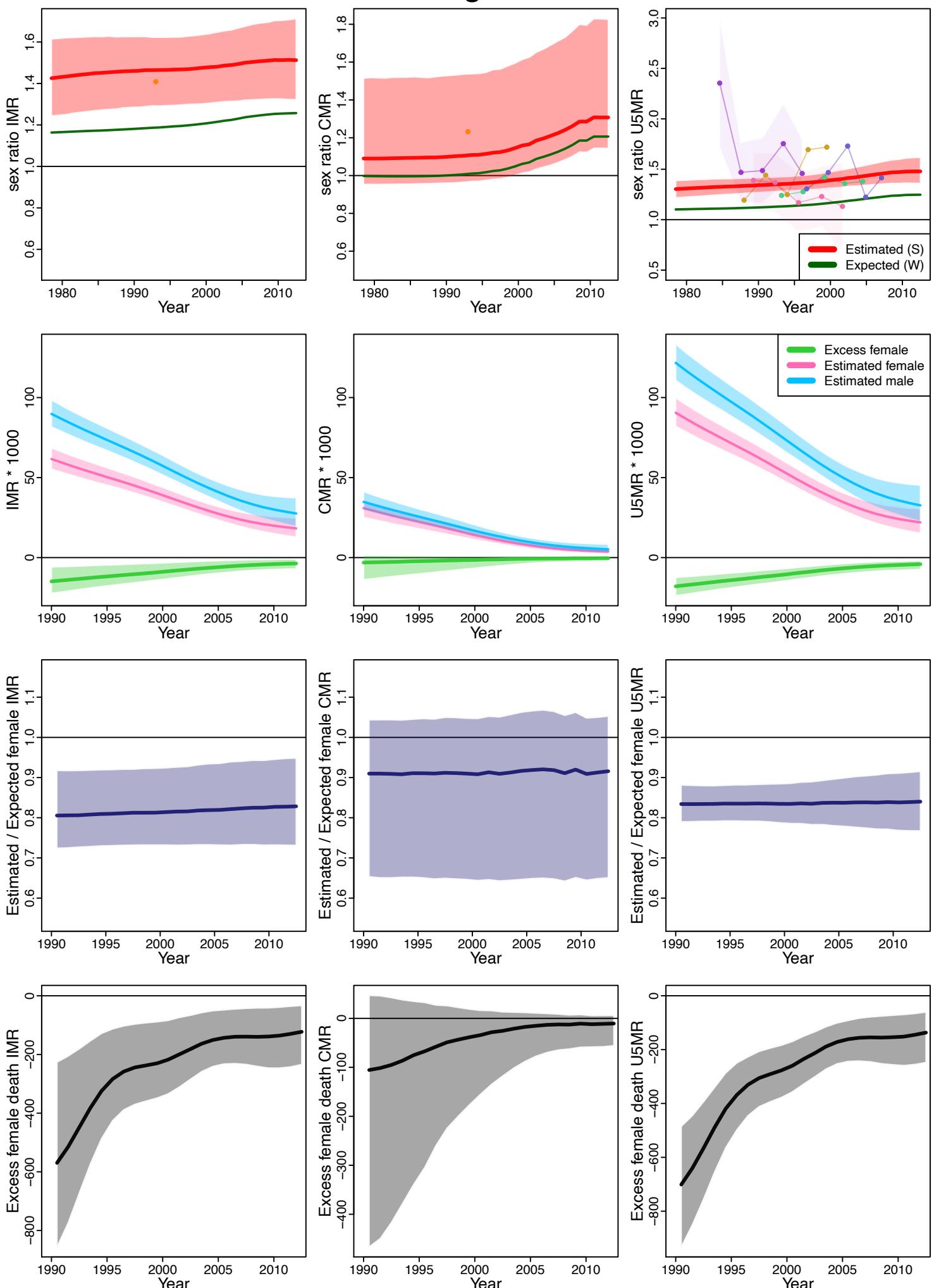
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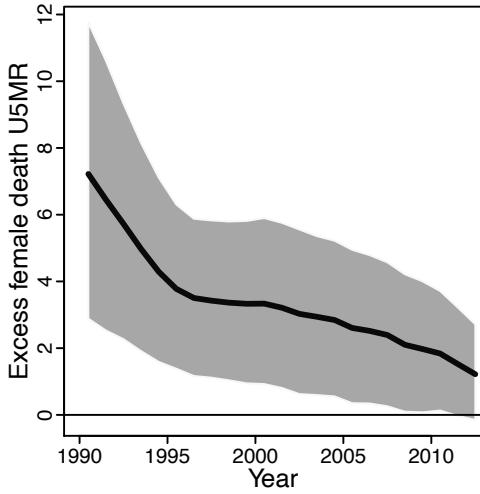
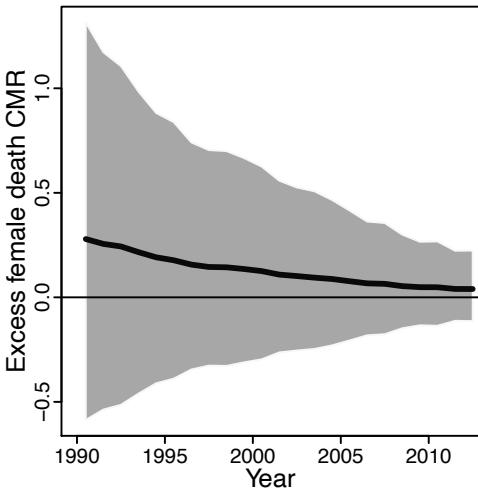
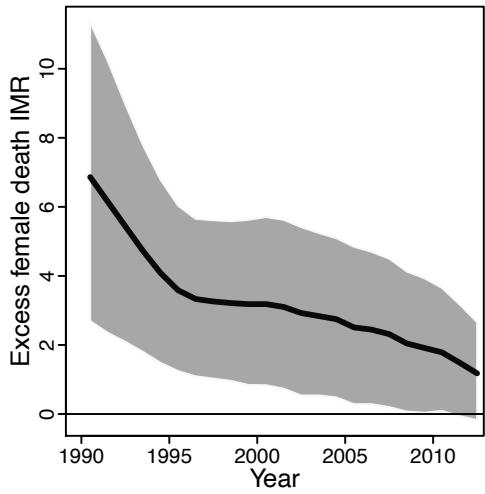
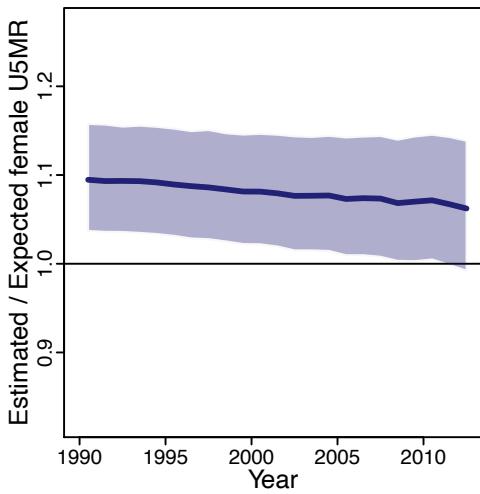
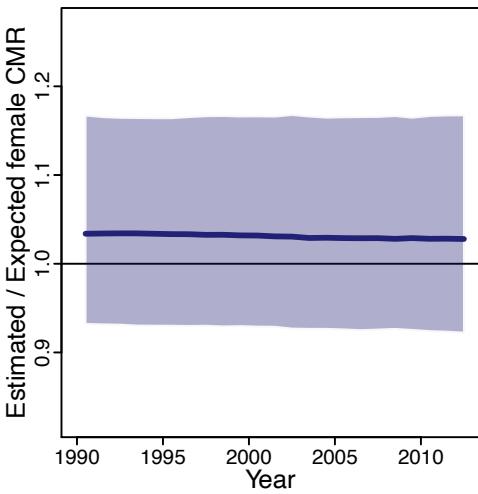
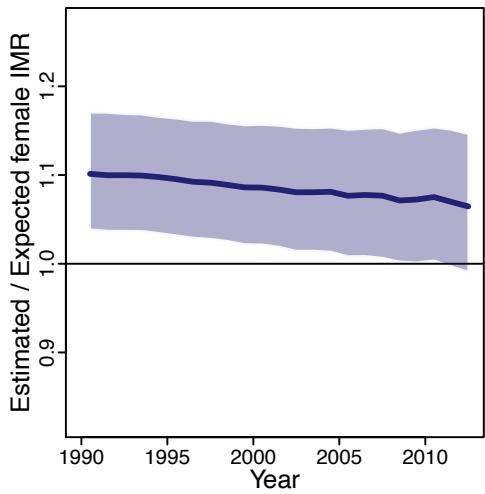
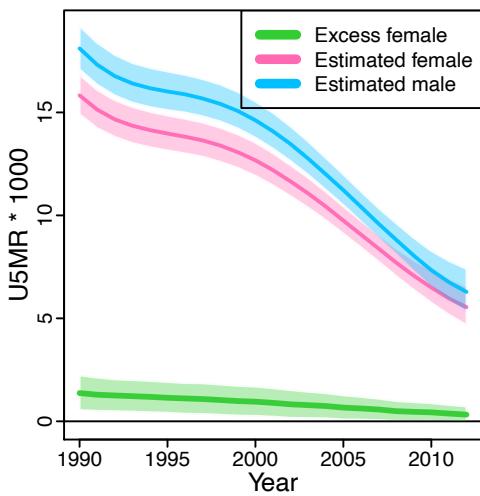
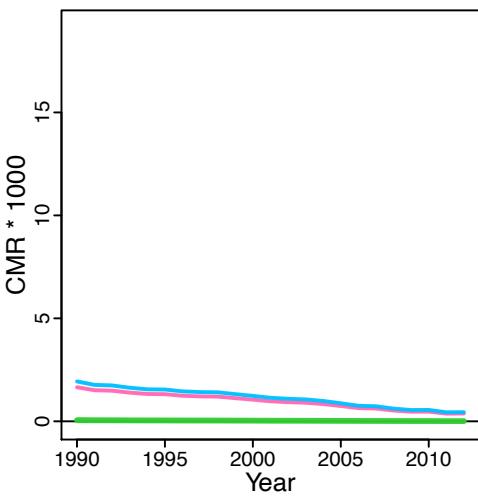
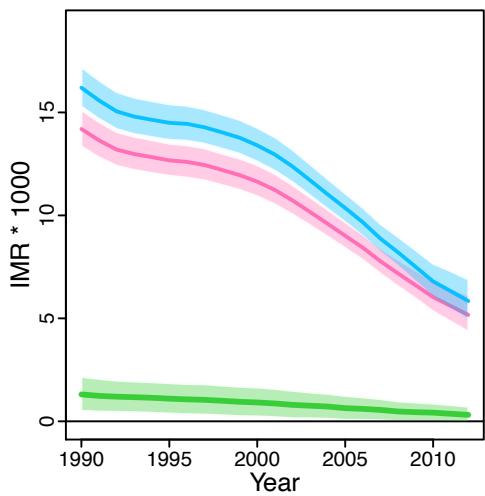
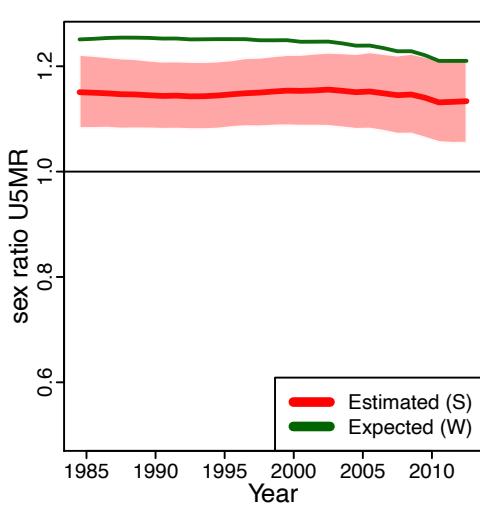
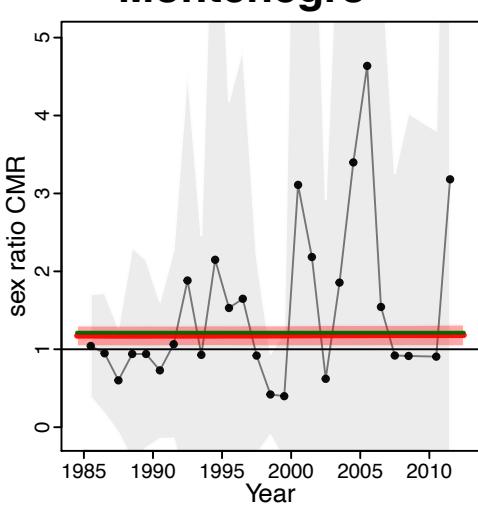
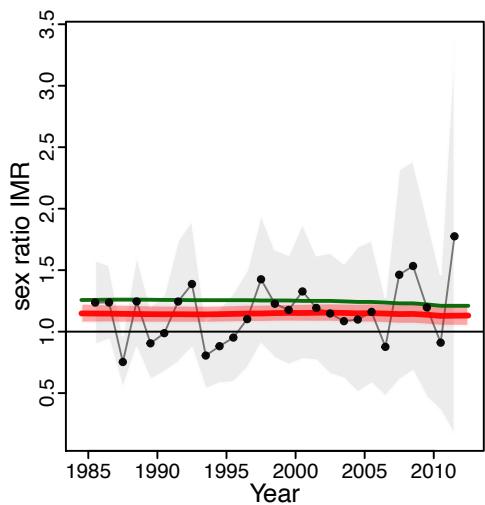
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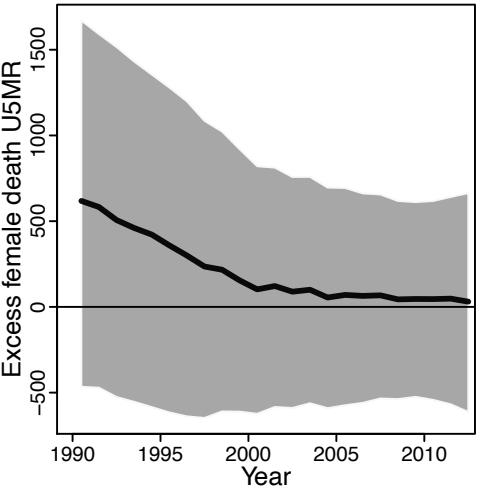
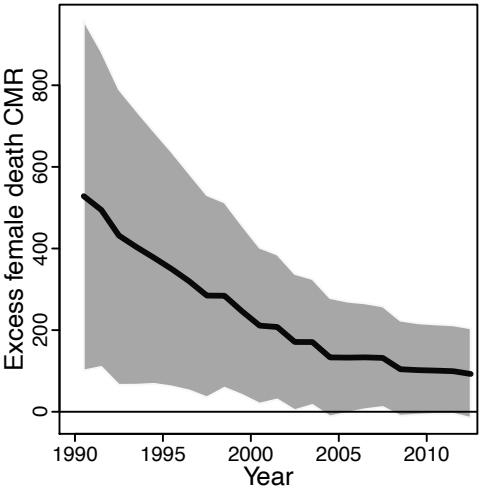
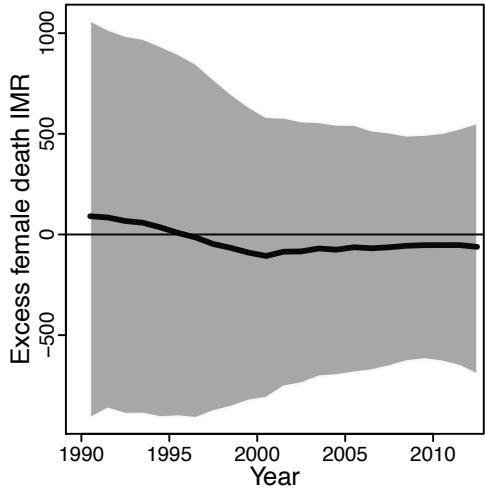
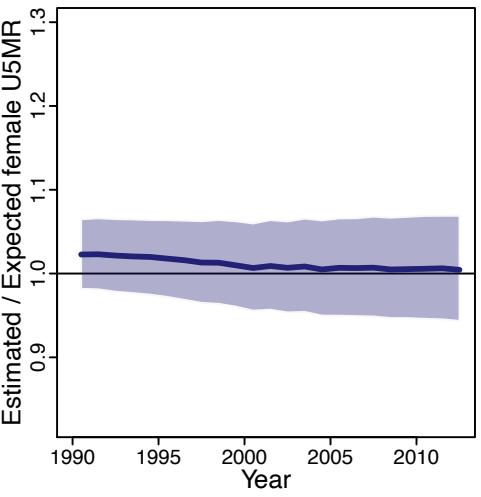
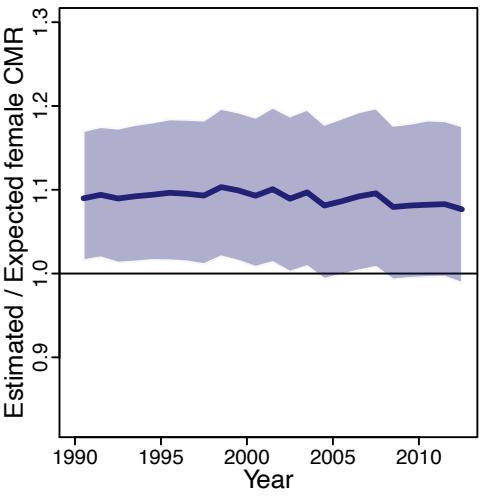
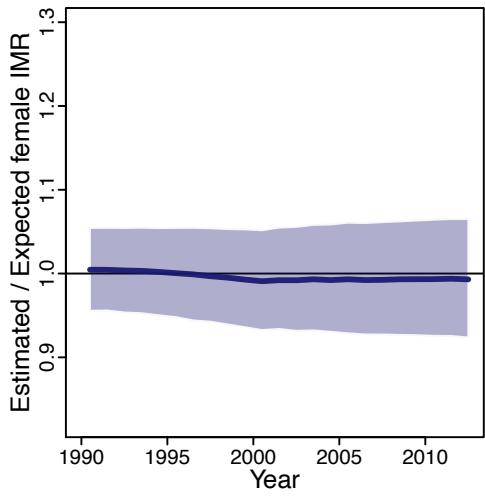
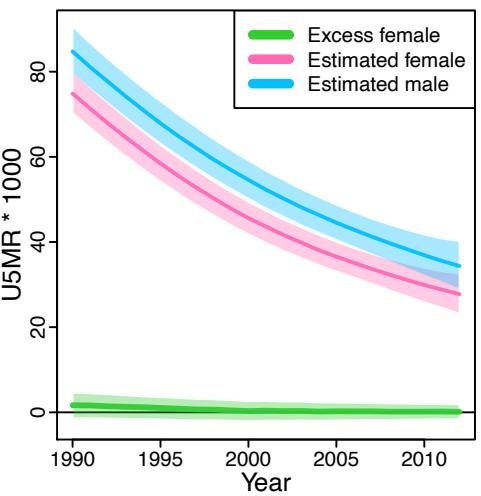
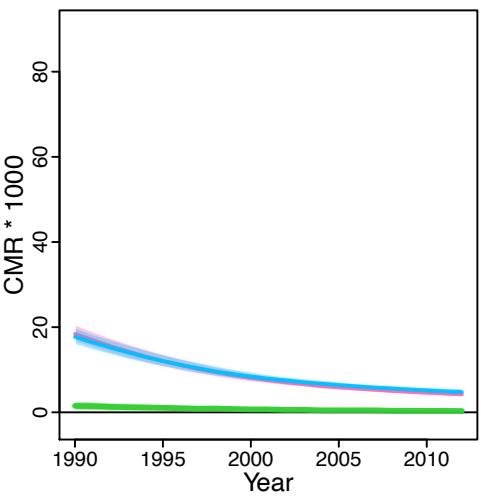
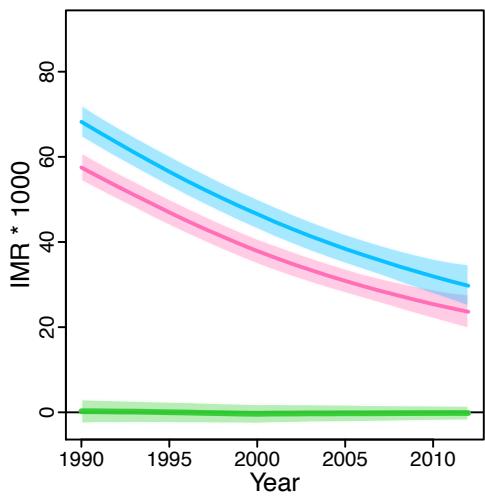
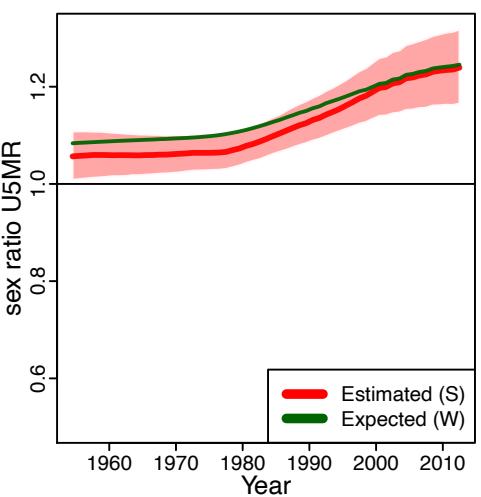
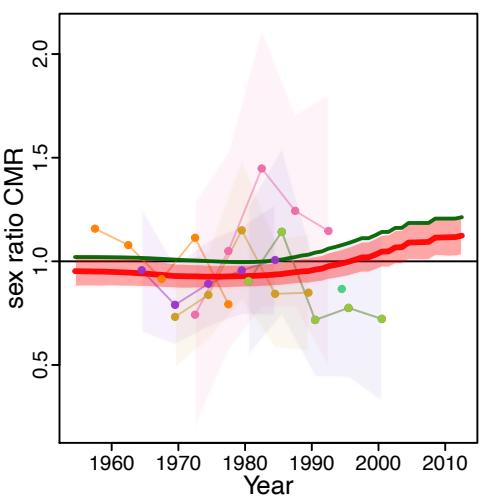
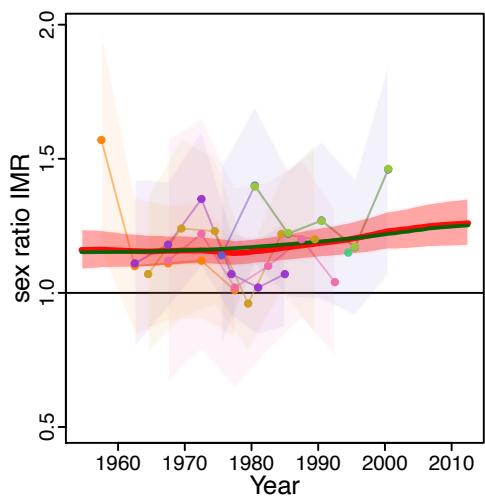
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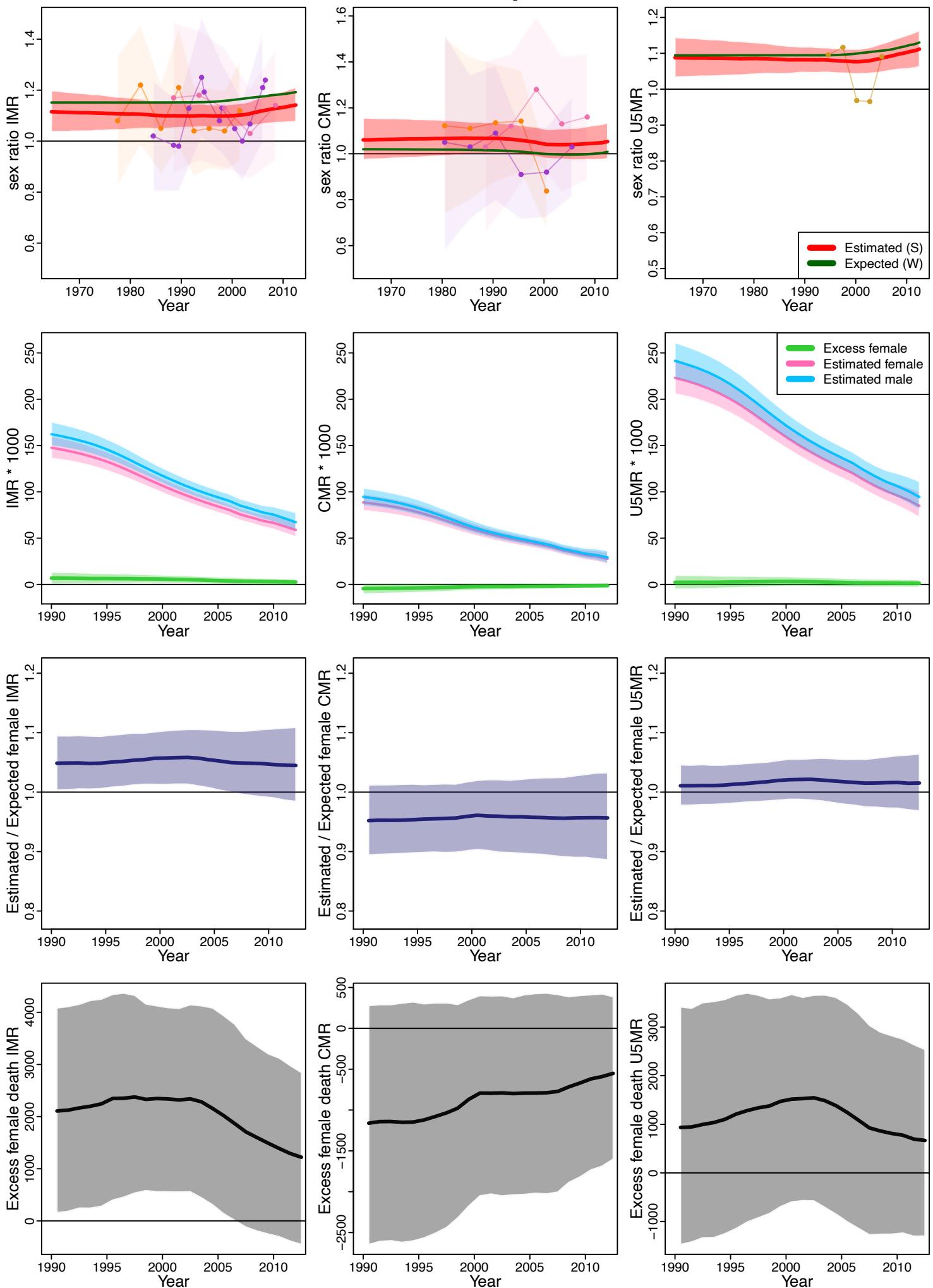
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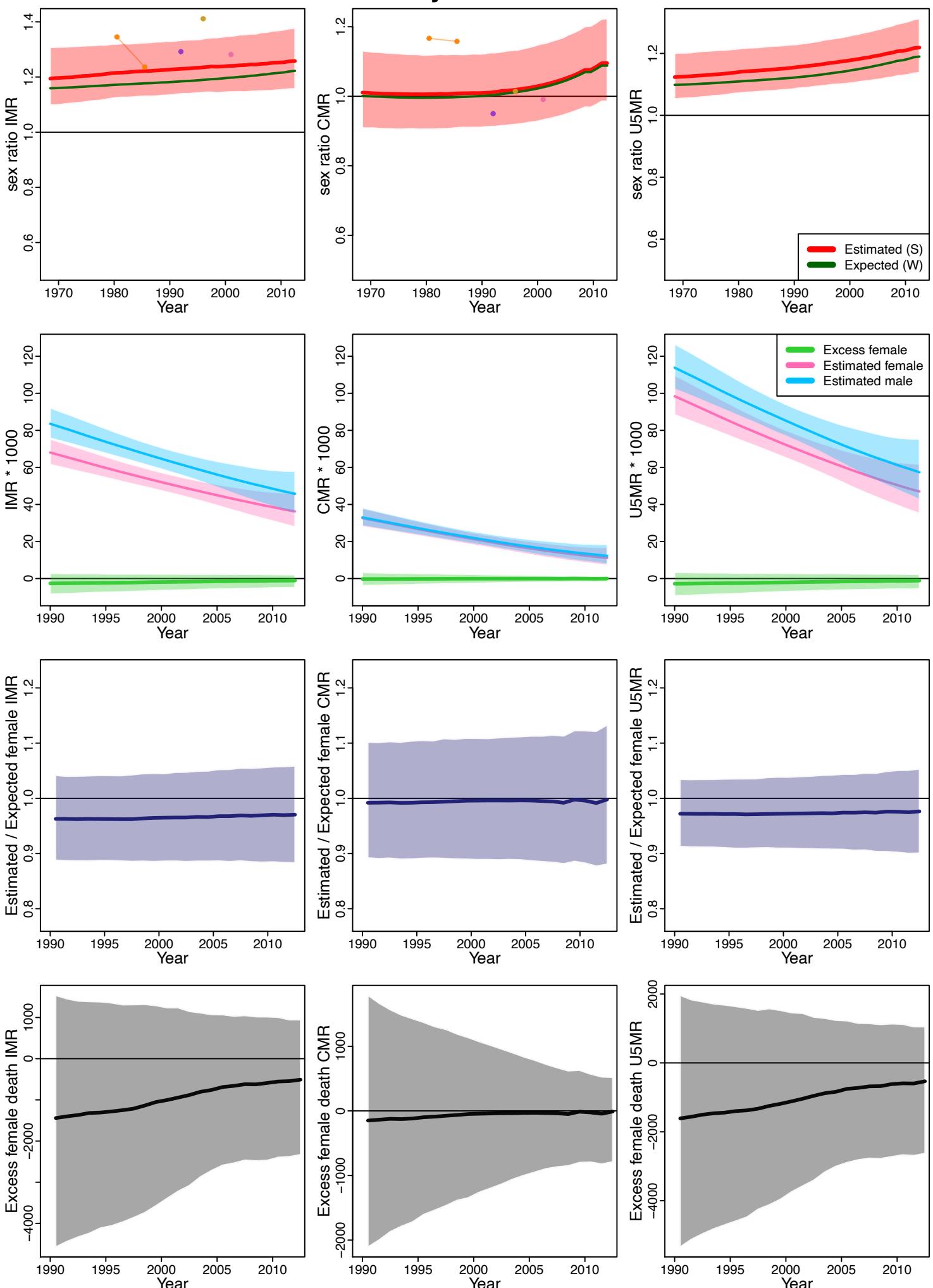
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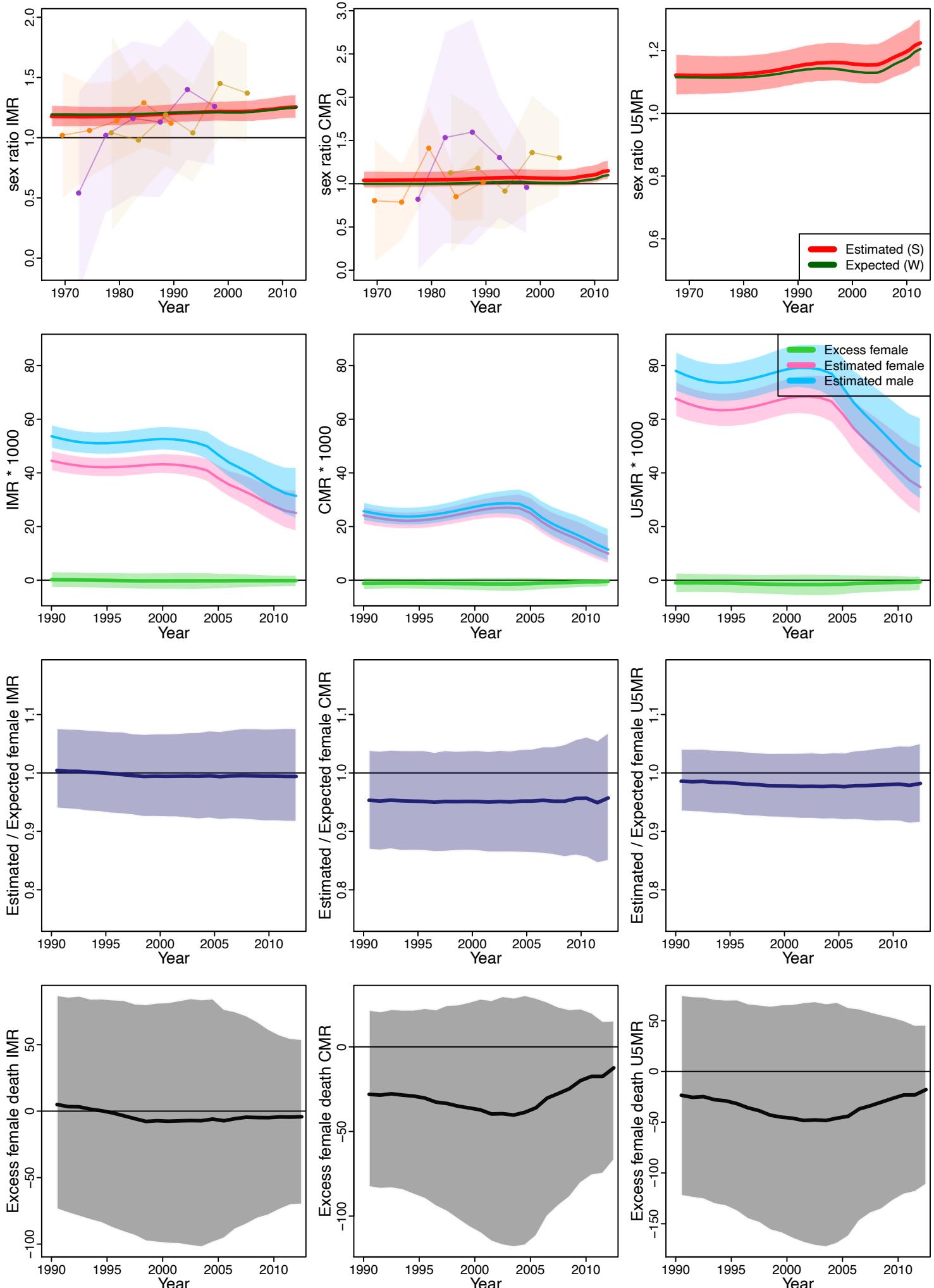
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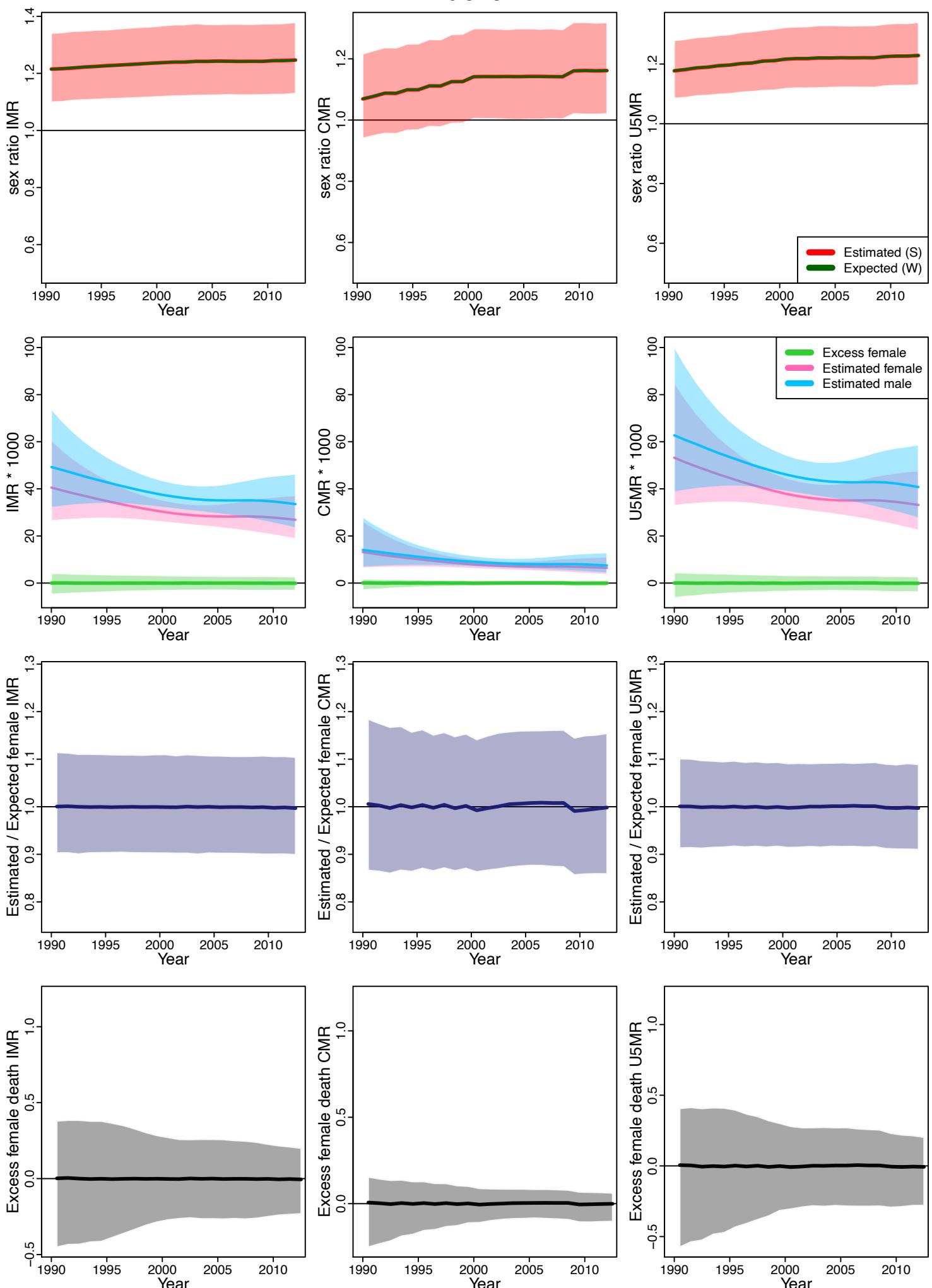
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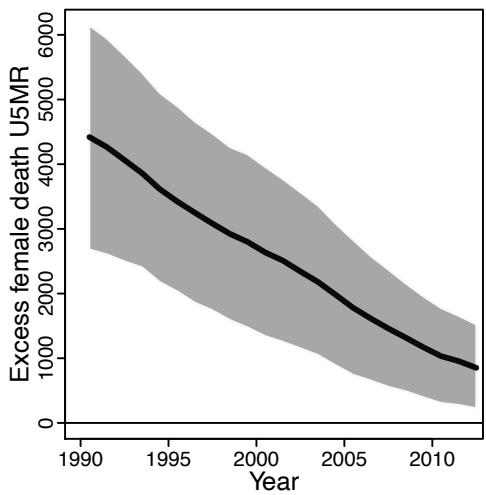
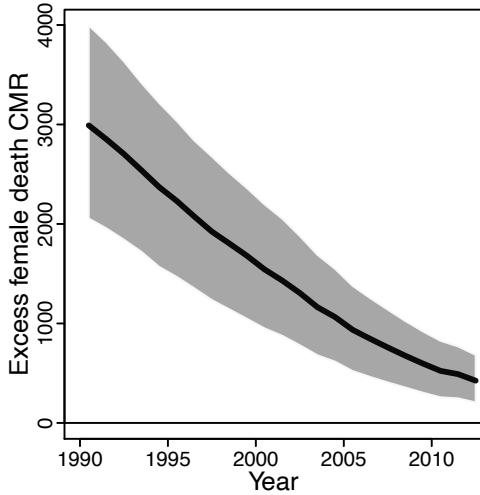
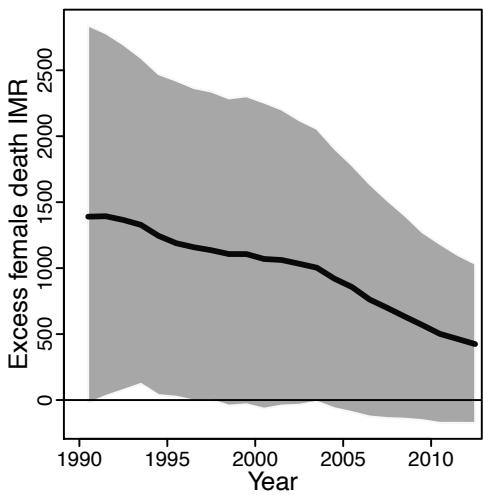
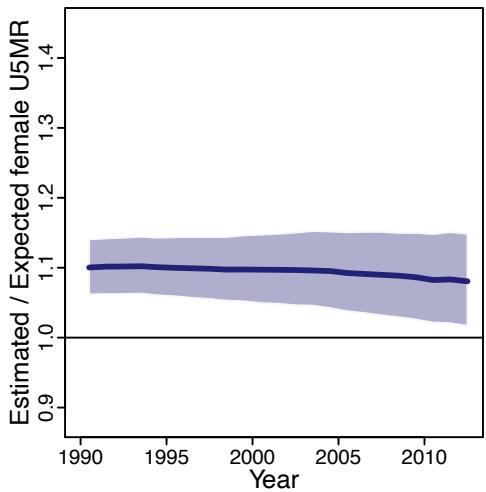
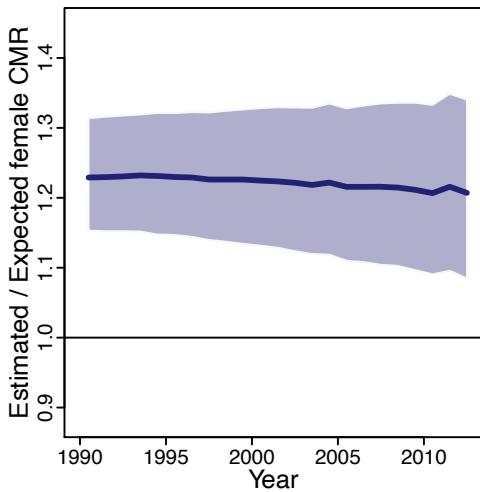
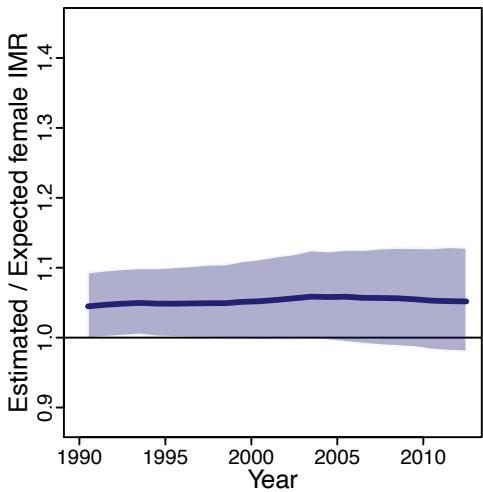
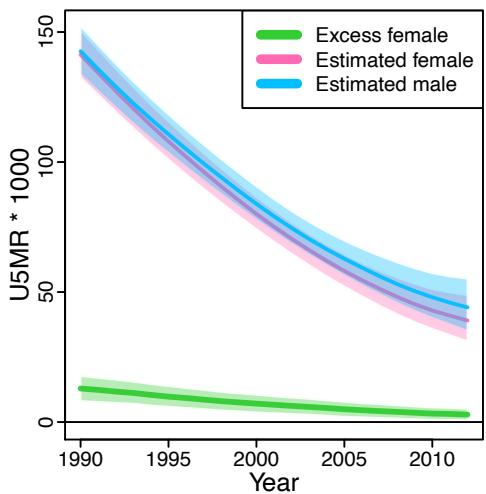
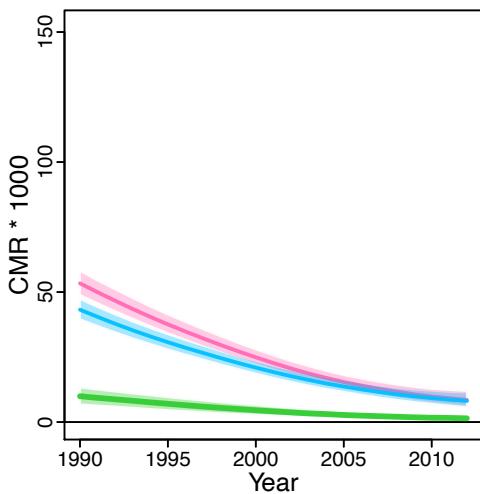
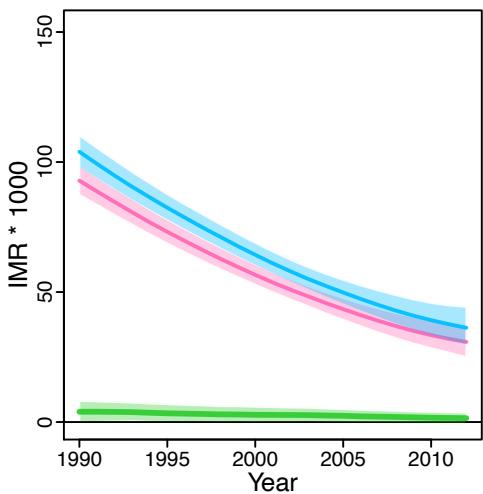
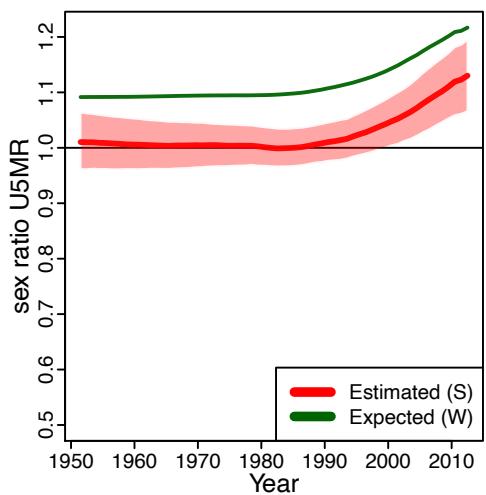
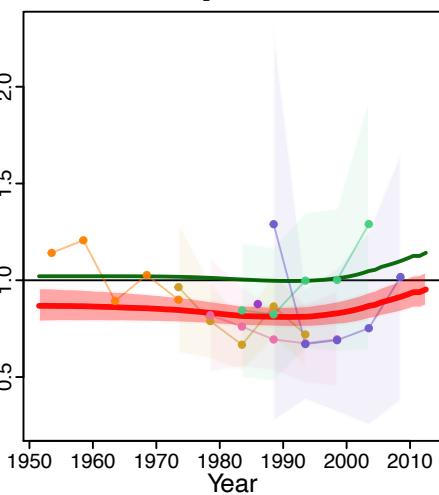
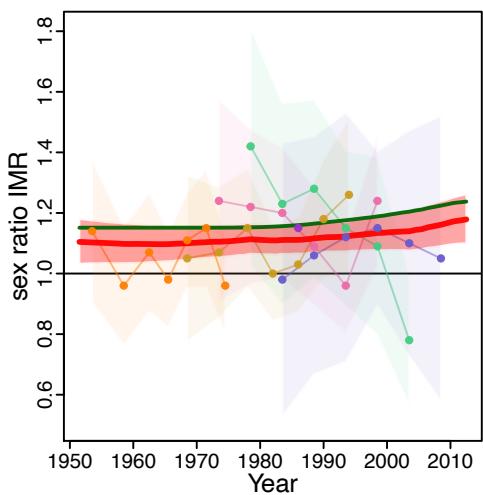
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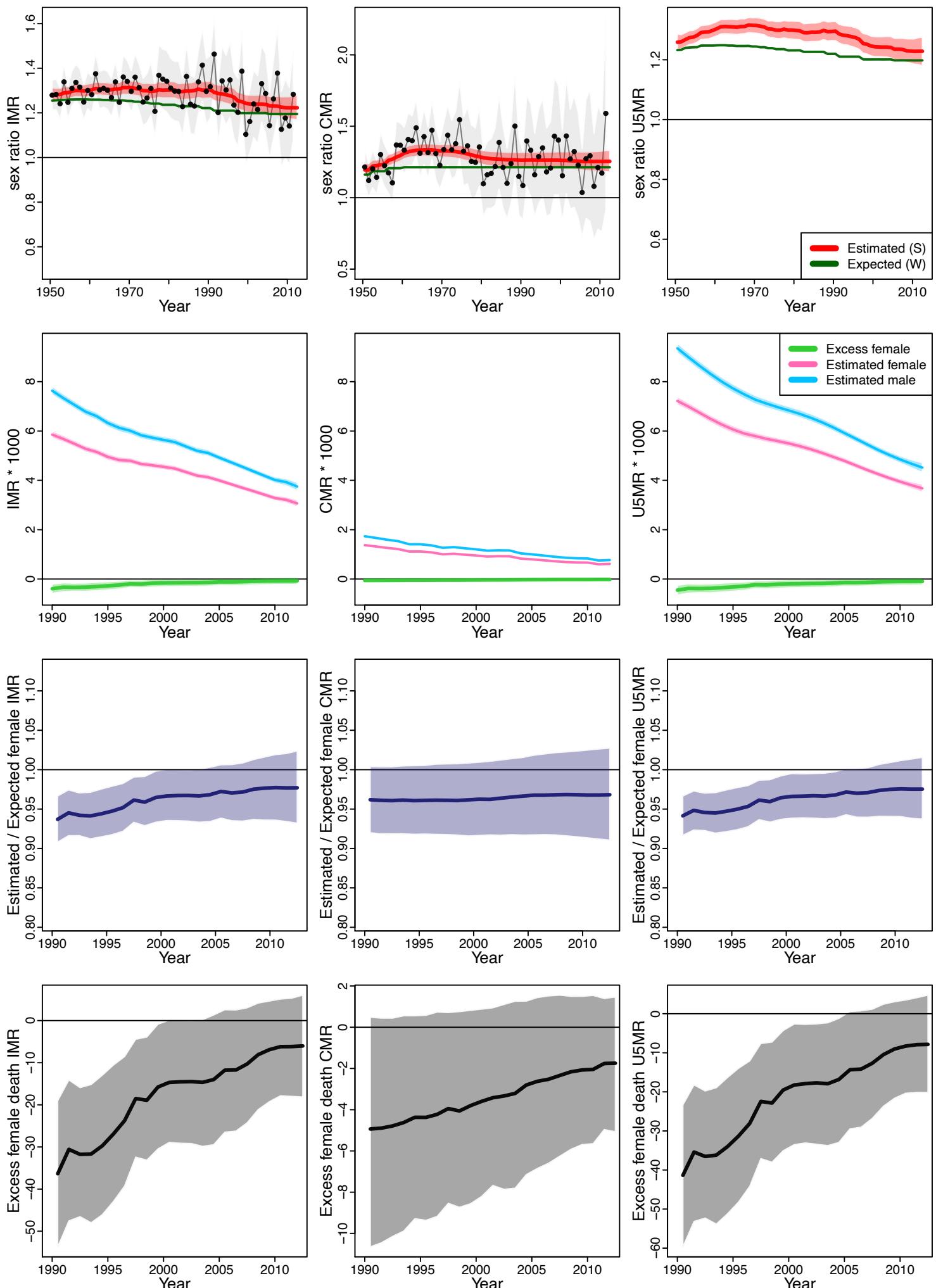
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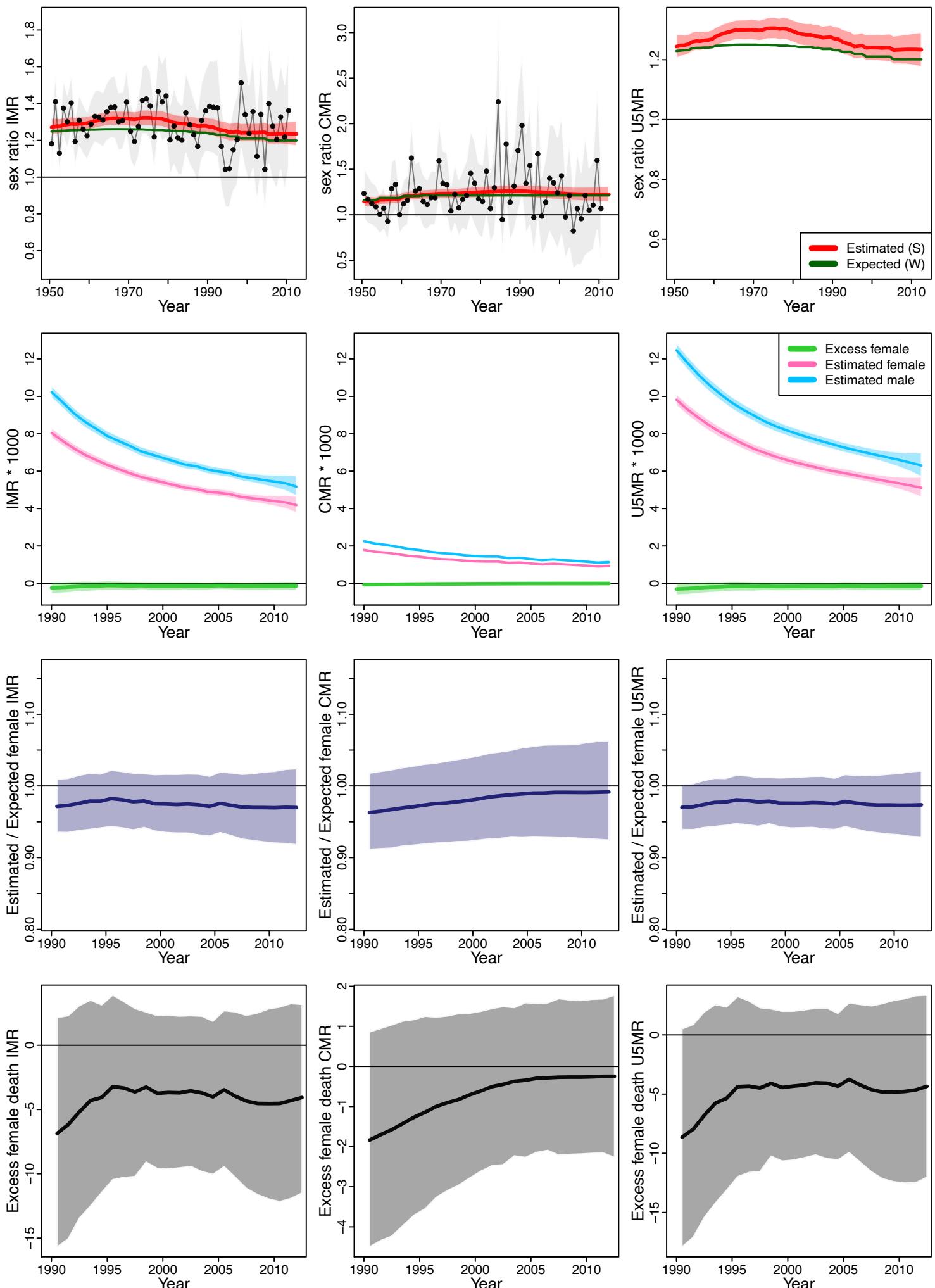
# Nepal



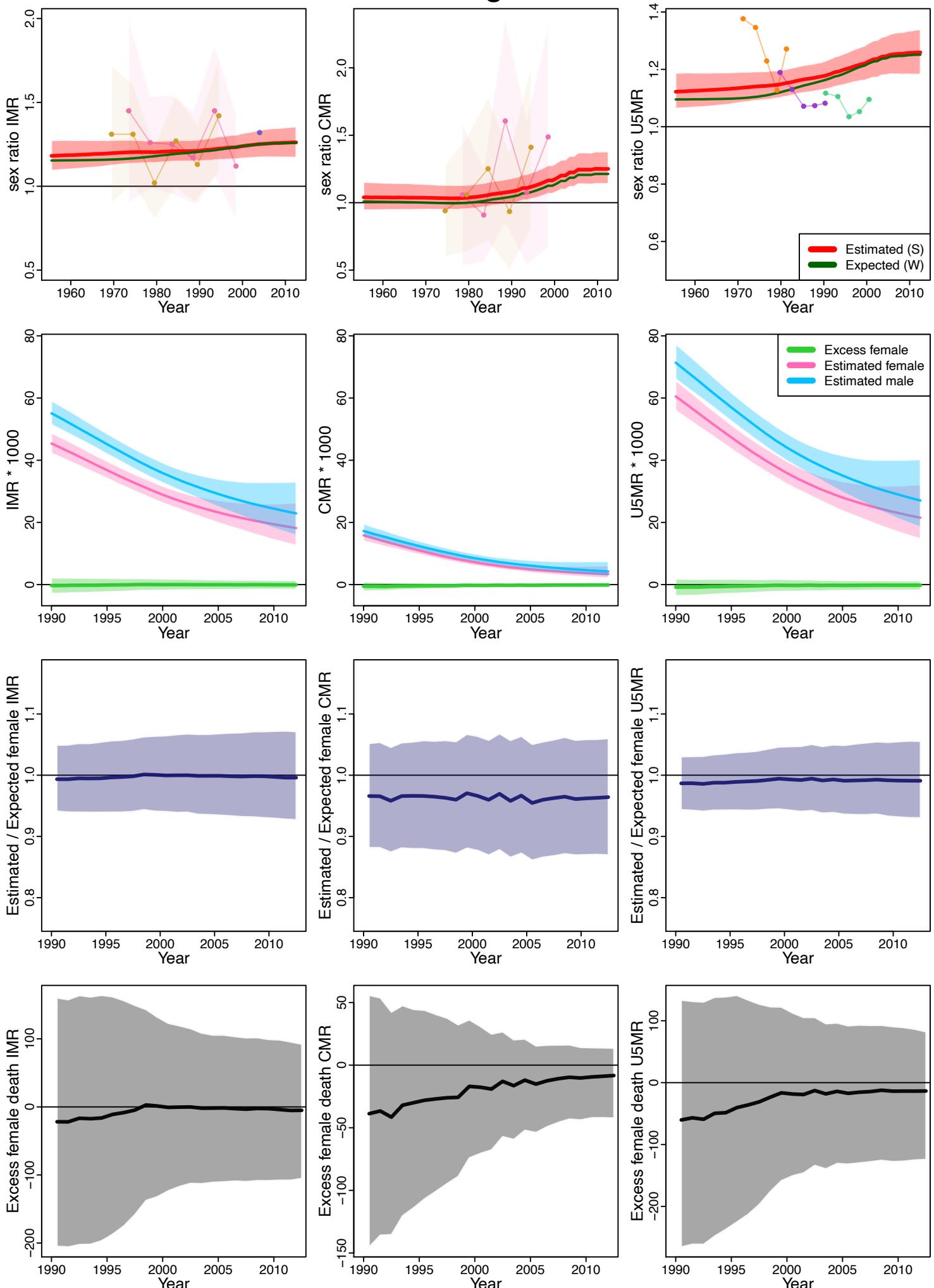
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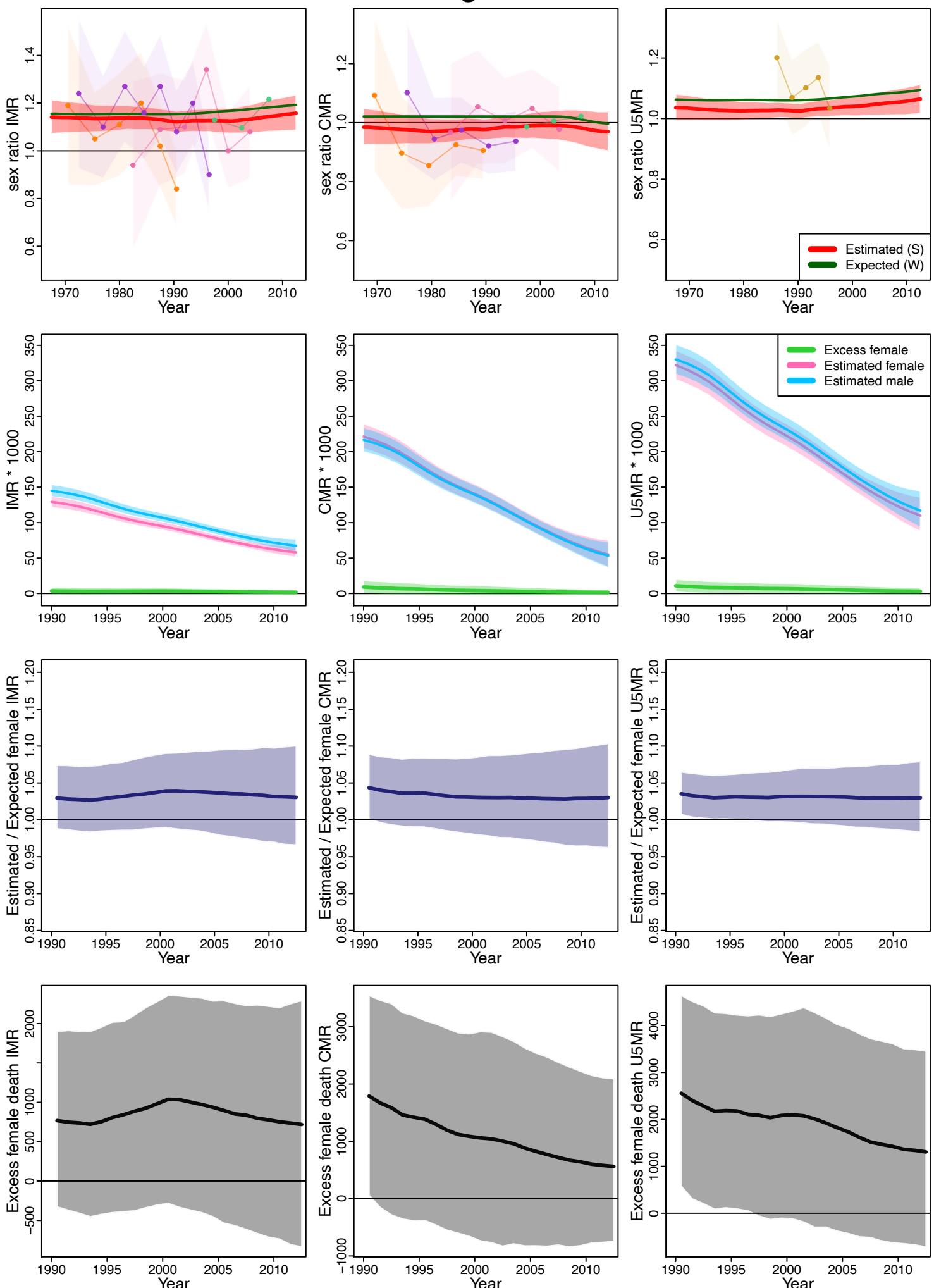
# New Zealand



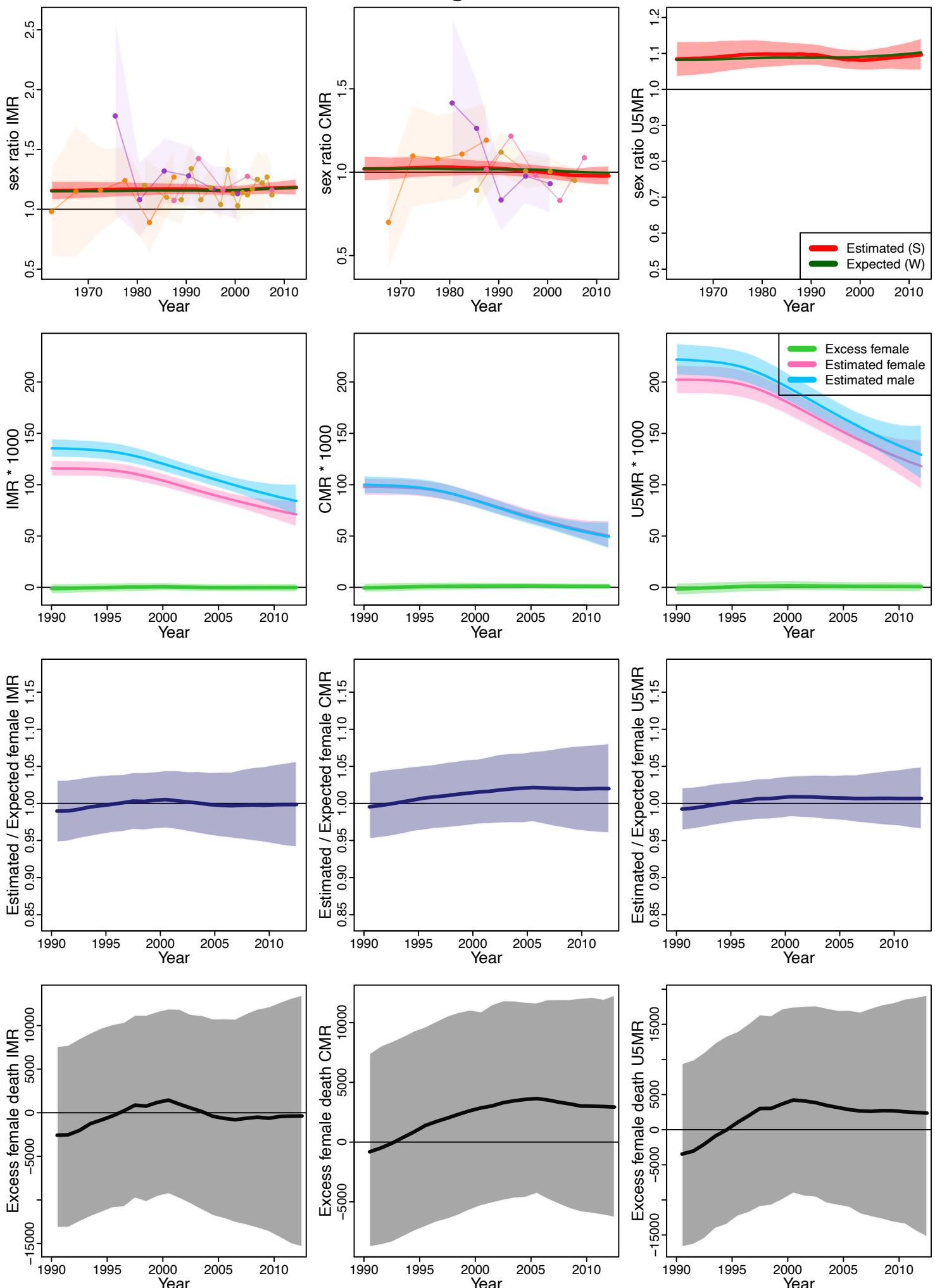
# Nicaragua



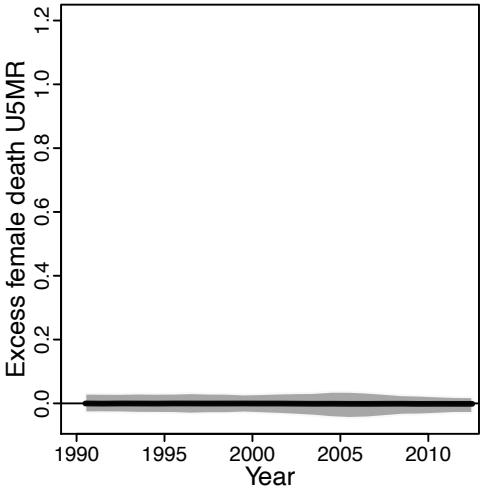
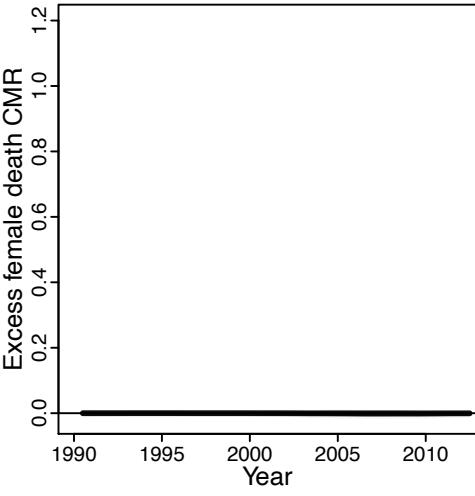
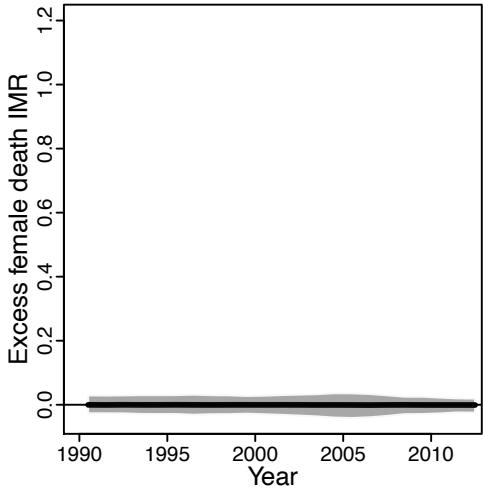
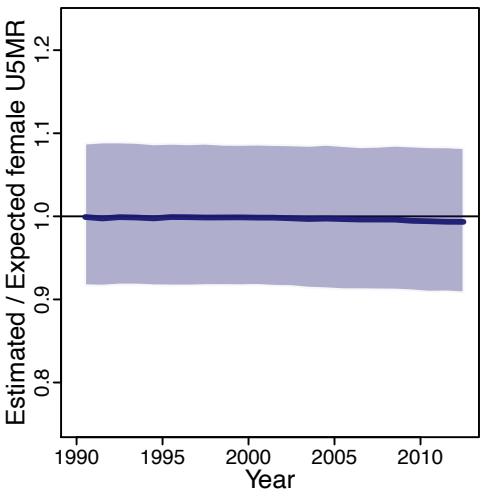
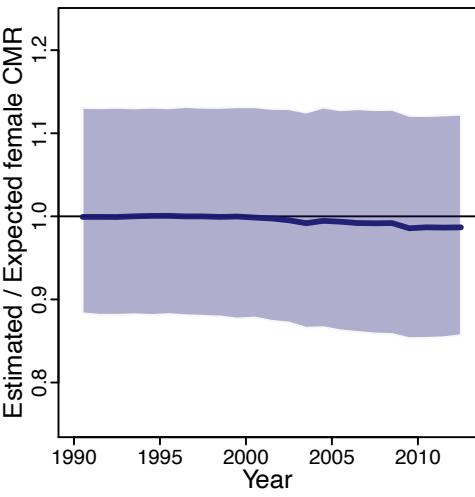
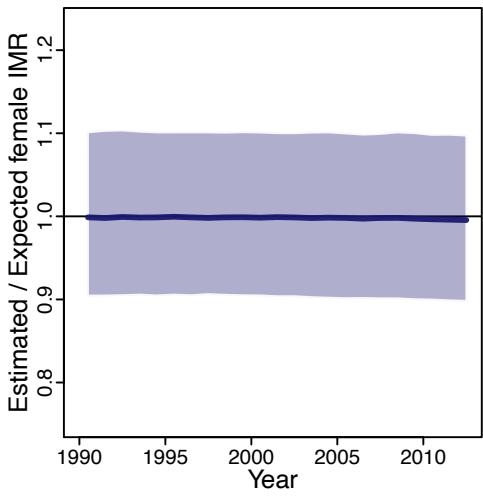
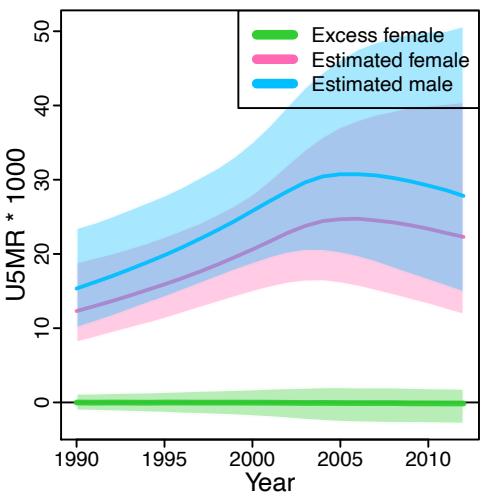
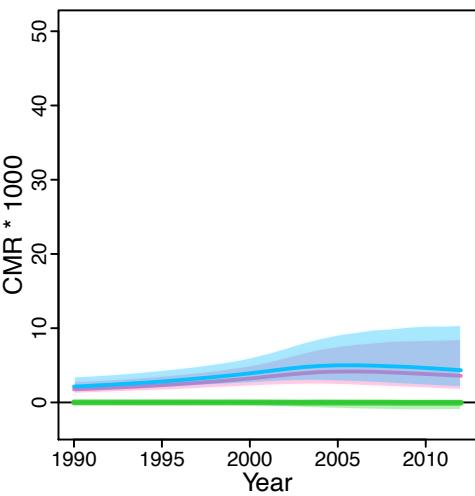
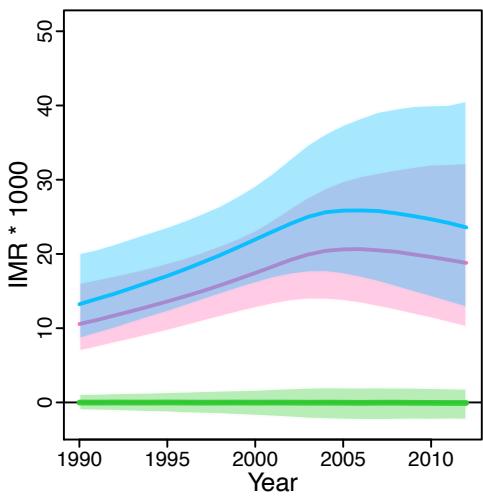
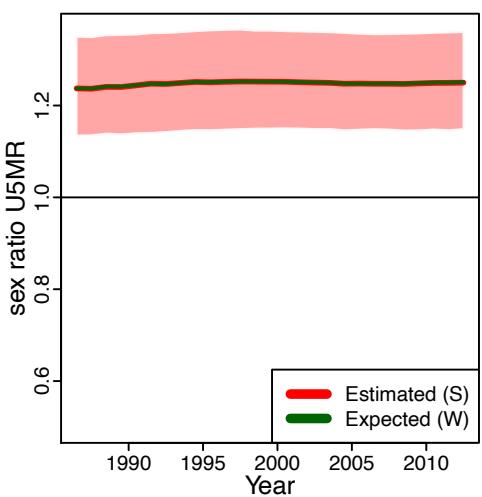
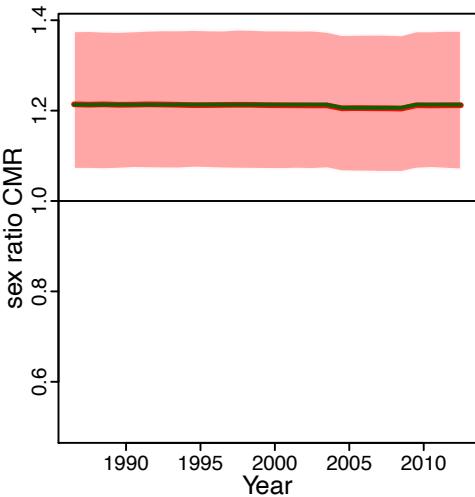
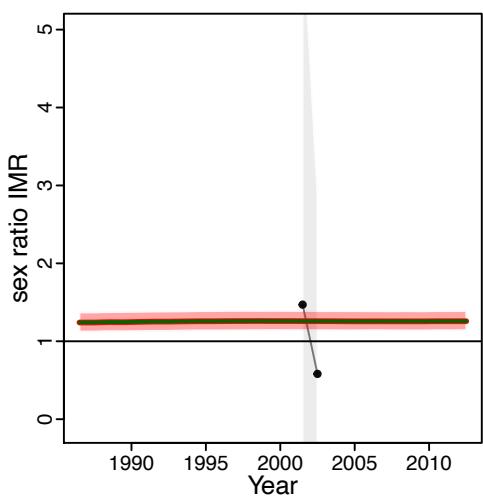
# Niger



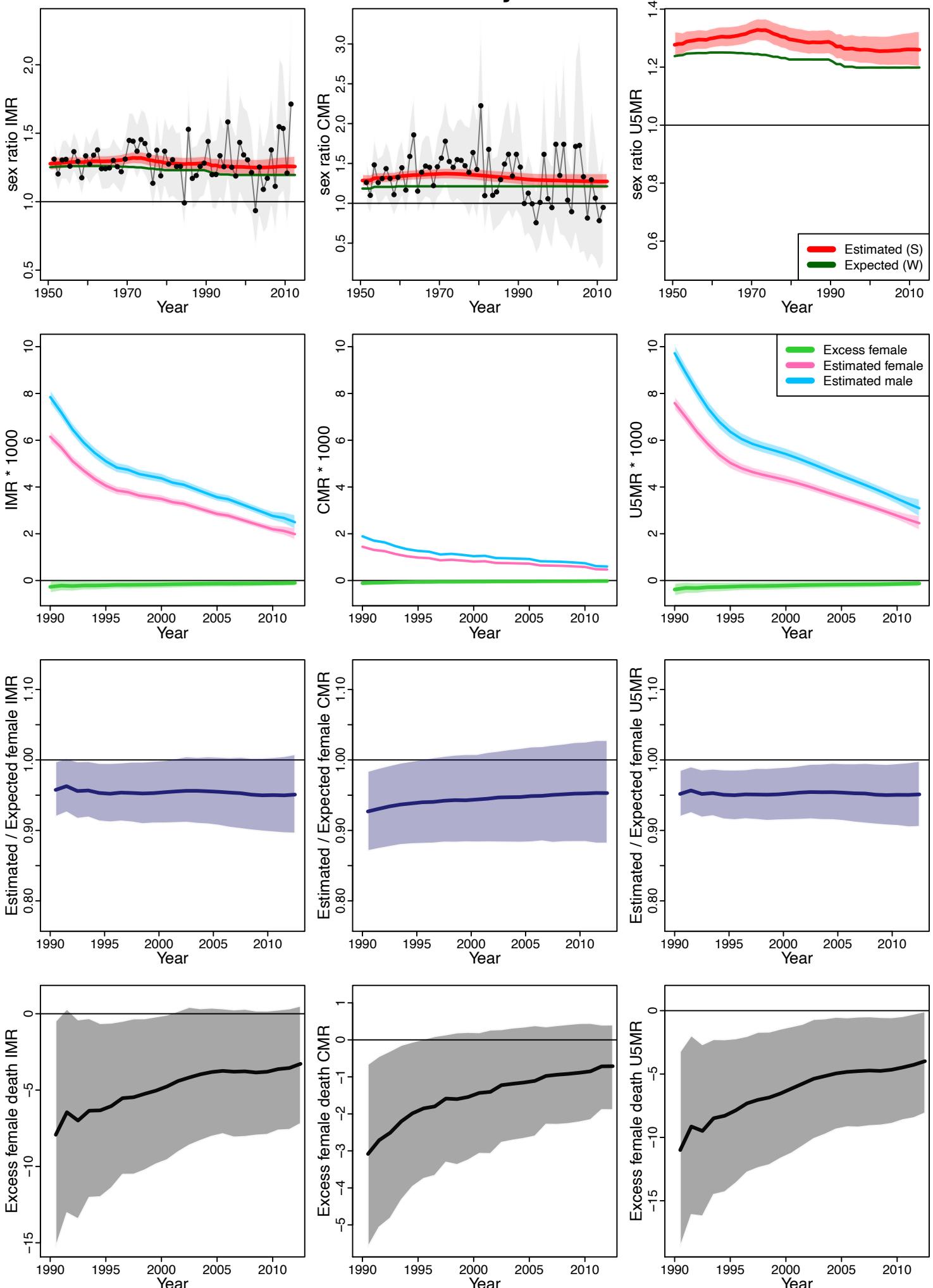
# Nigeria



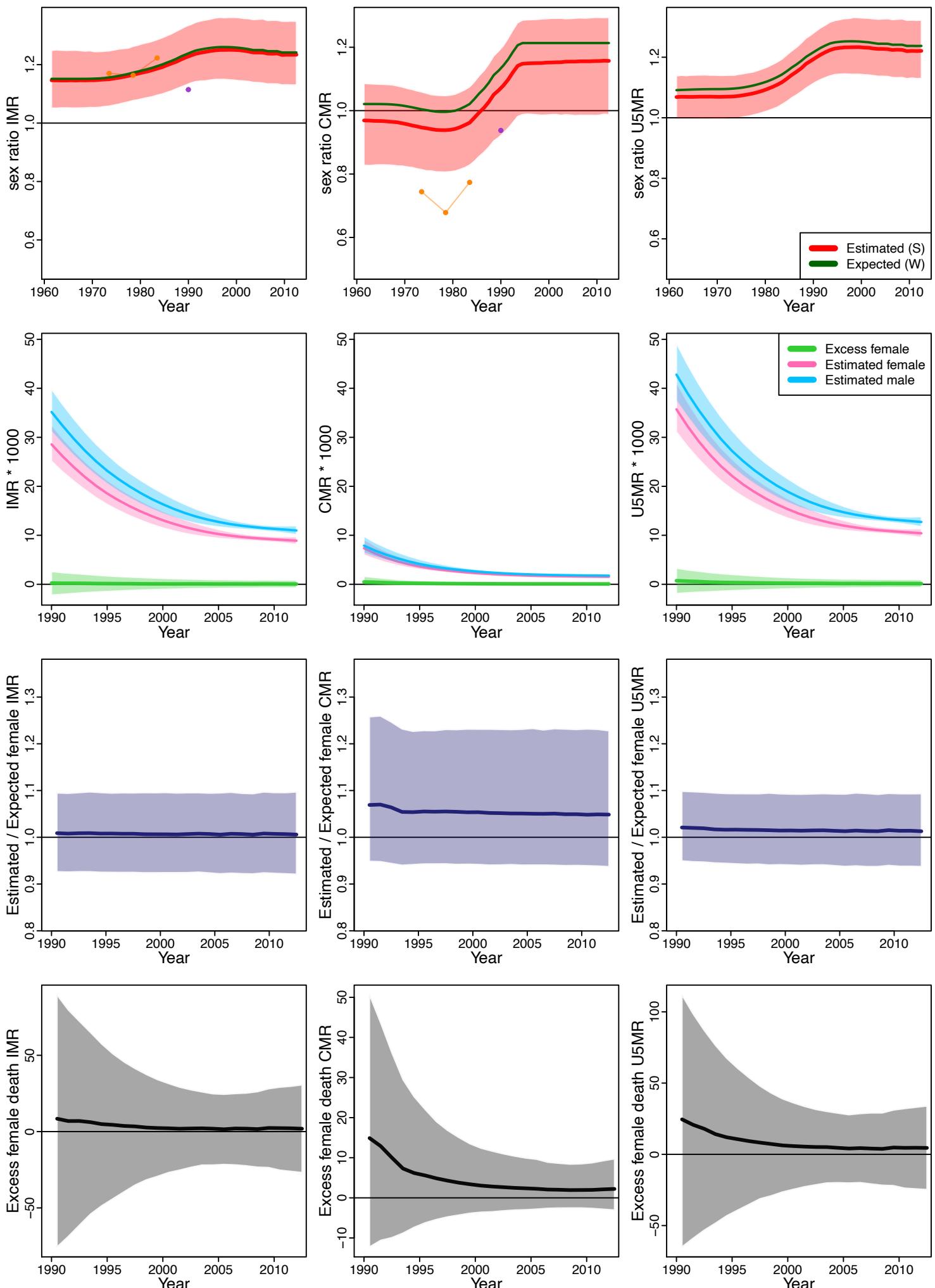
# Niue



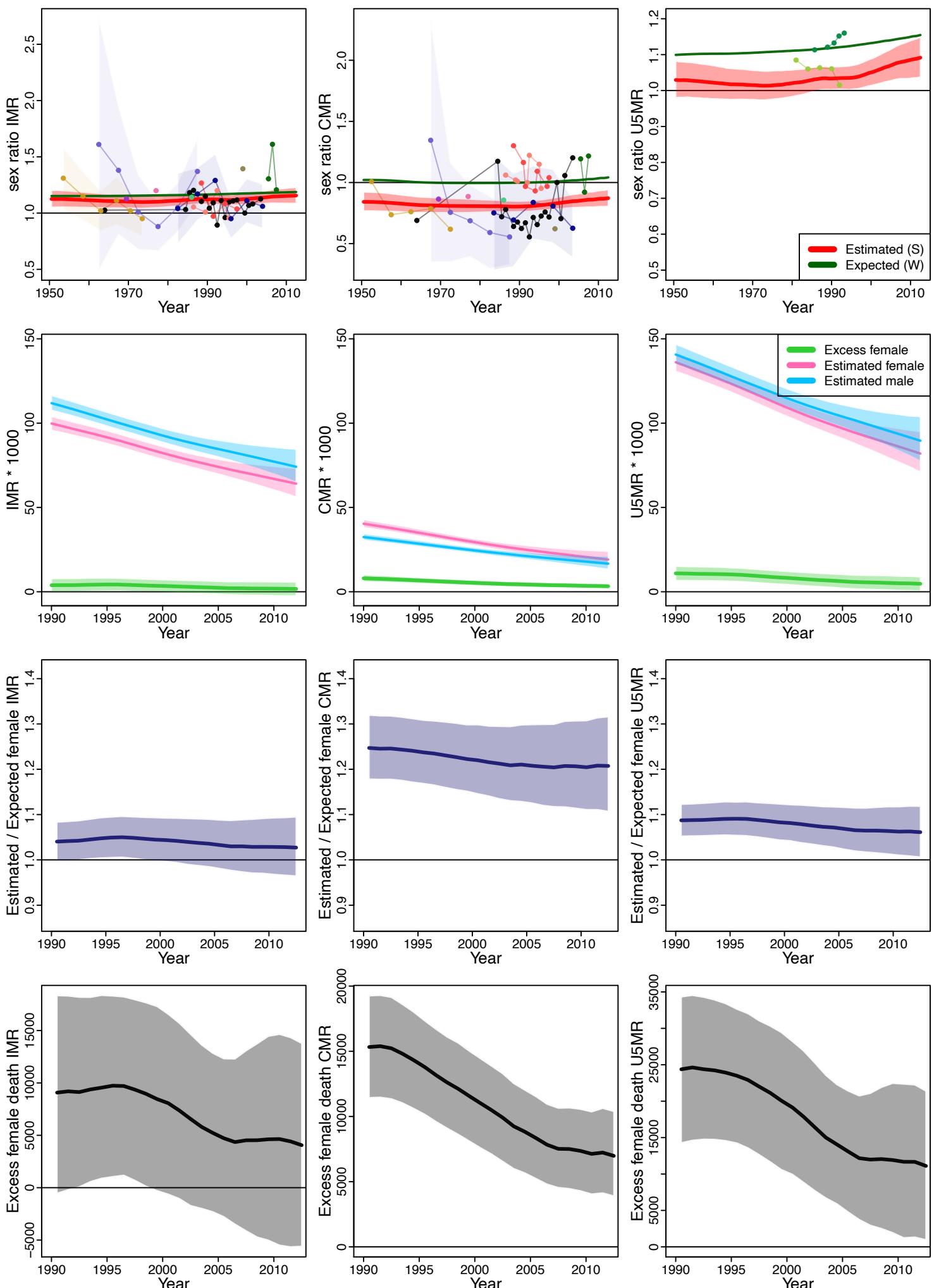
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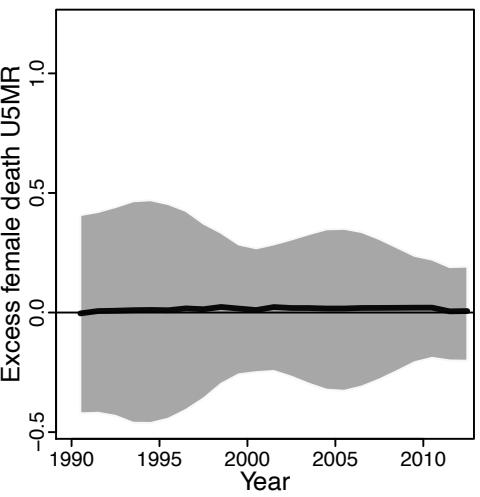
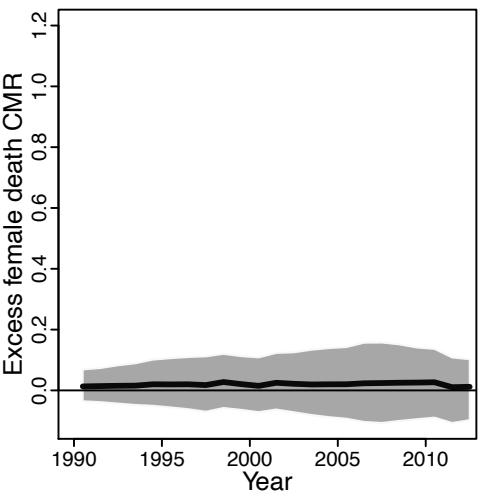
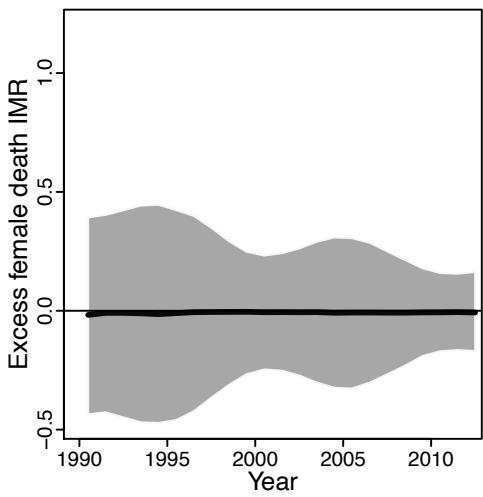
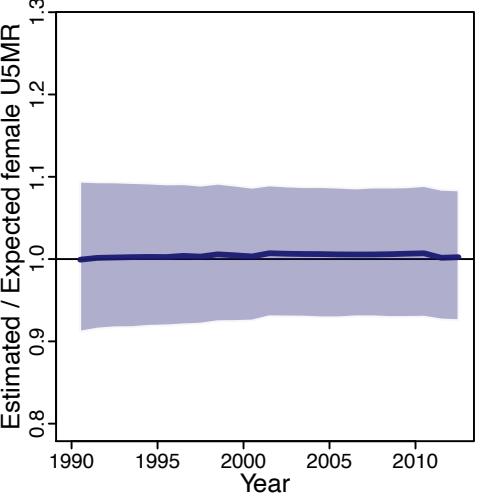
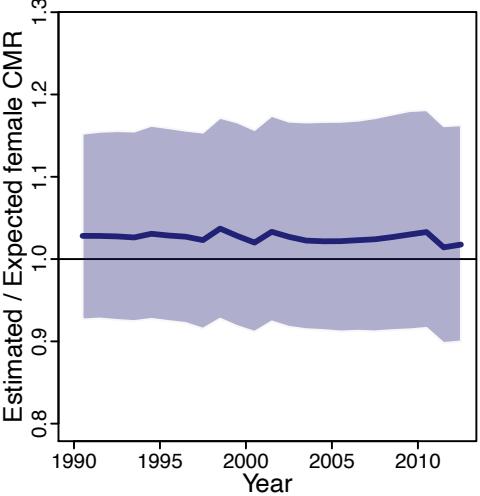
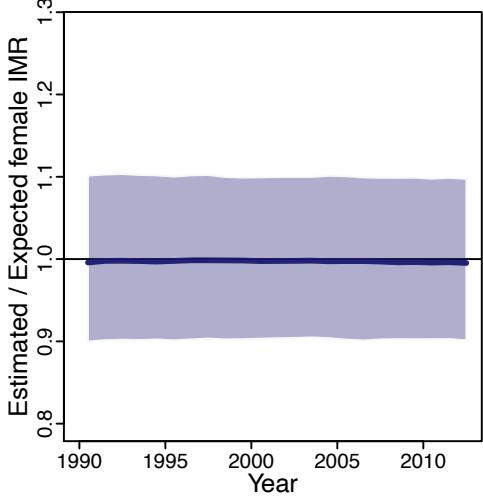
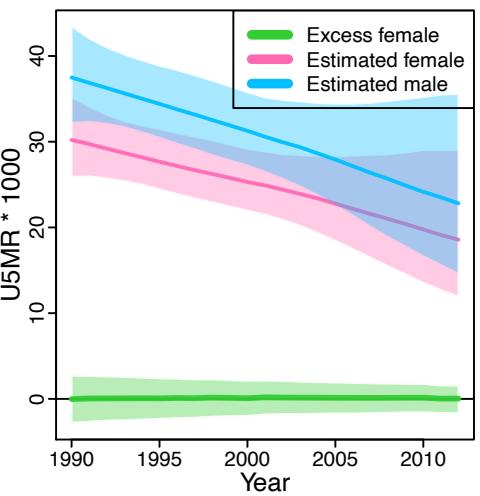
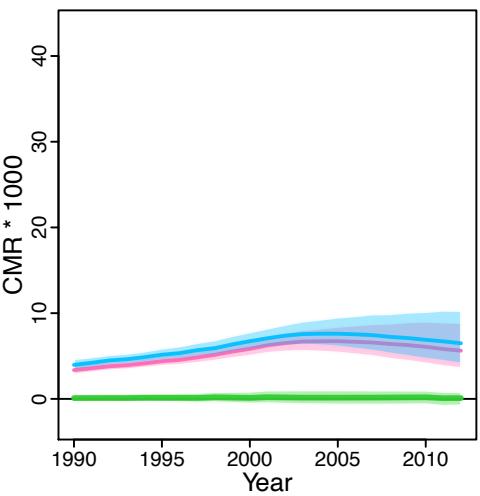
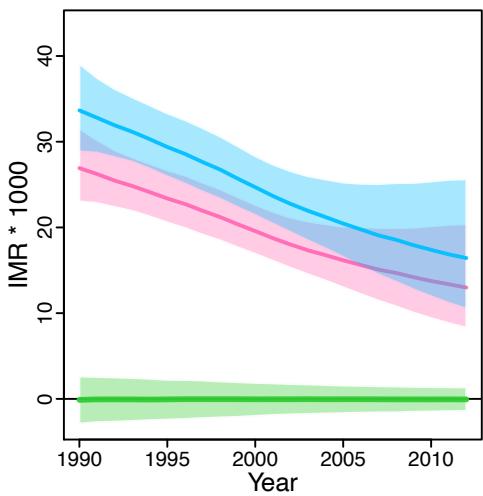
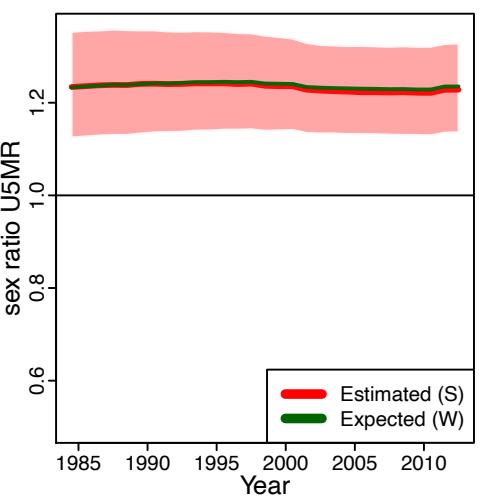
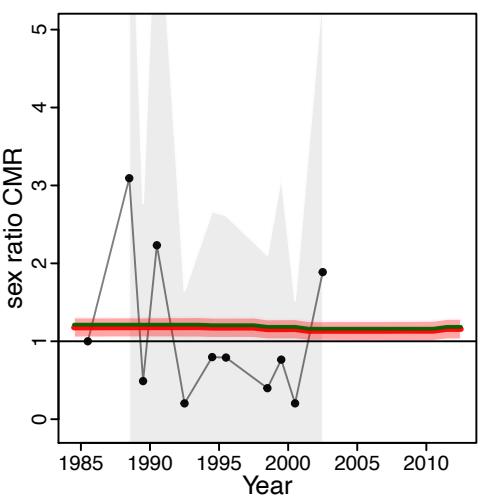
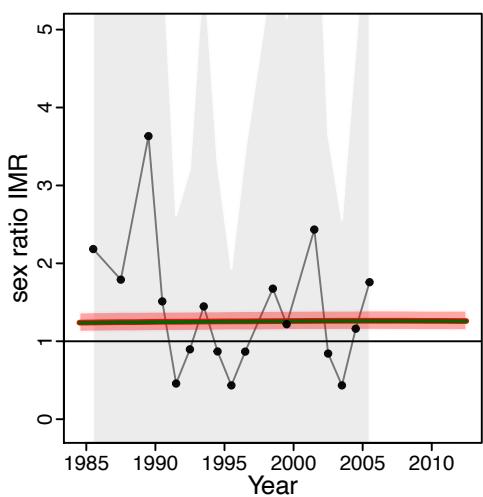
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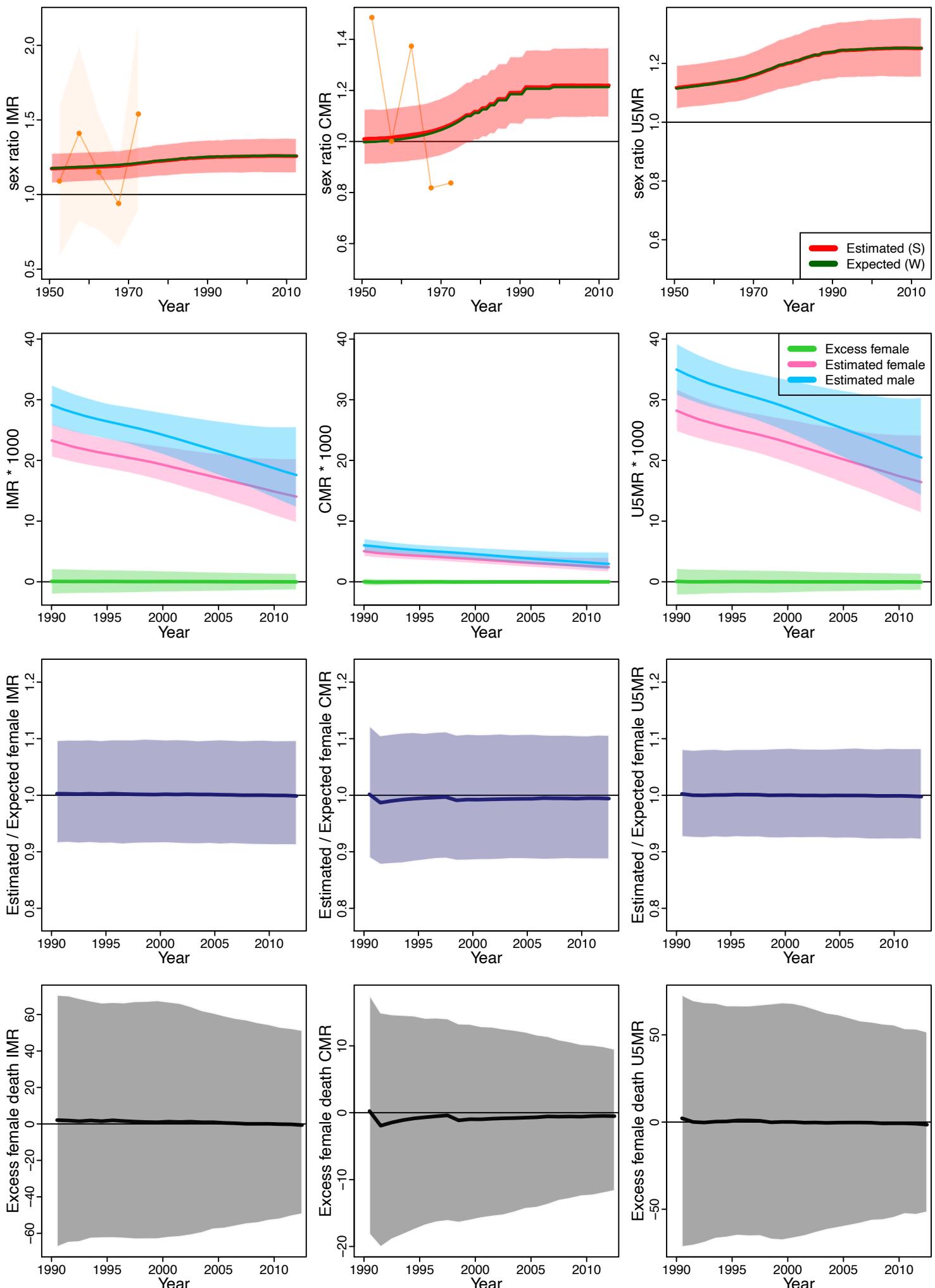
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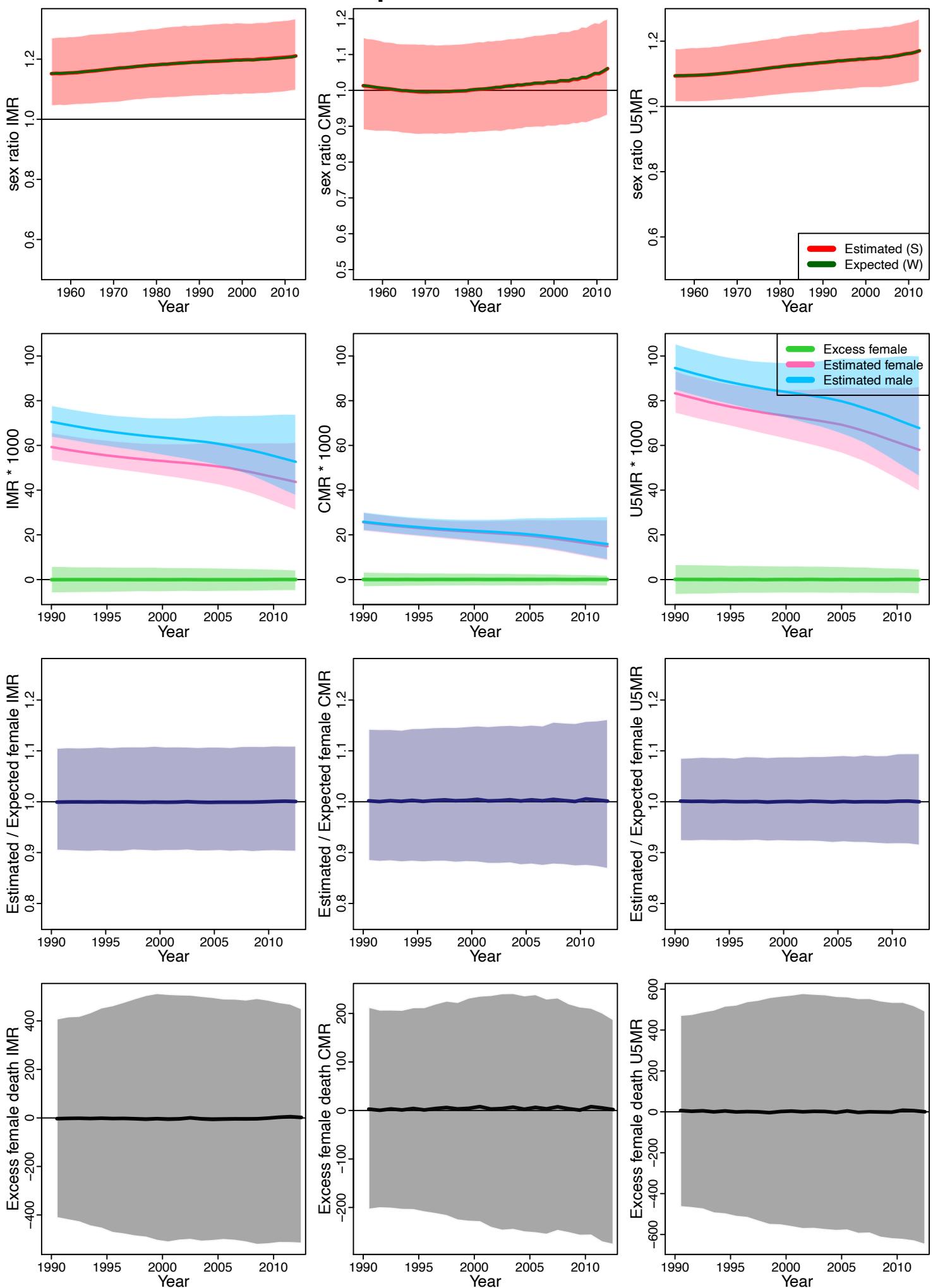
# Palau



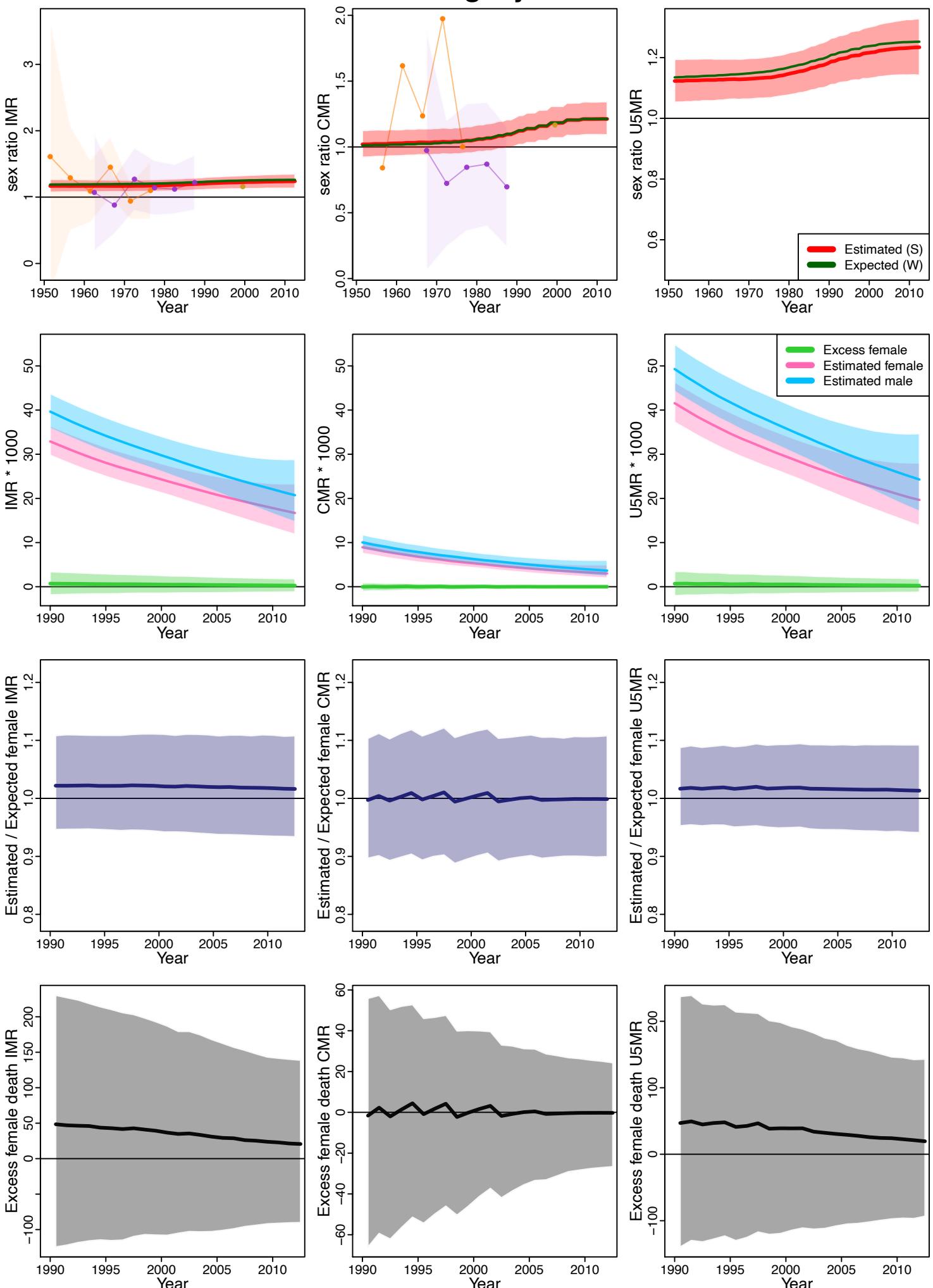
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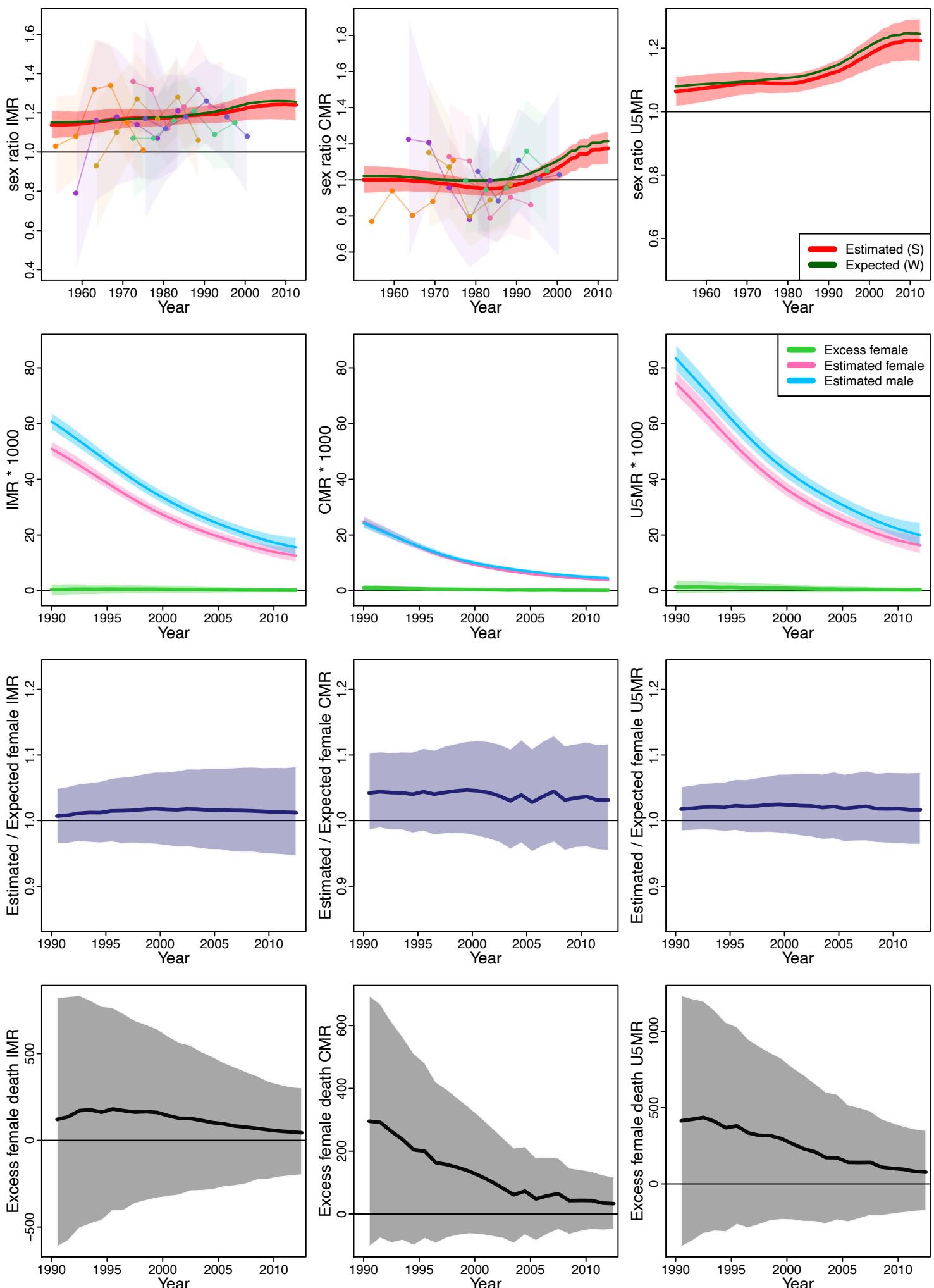
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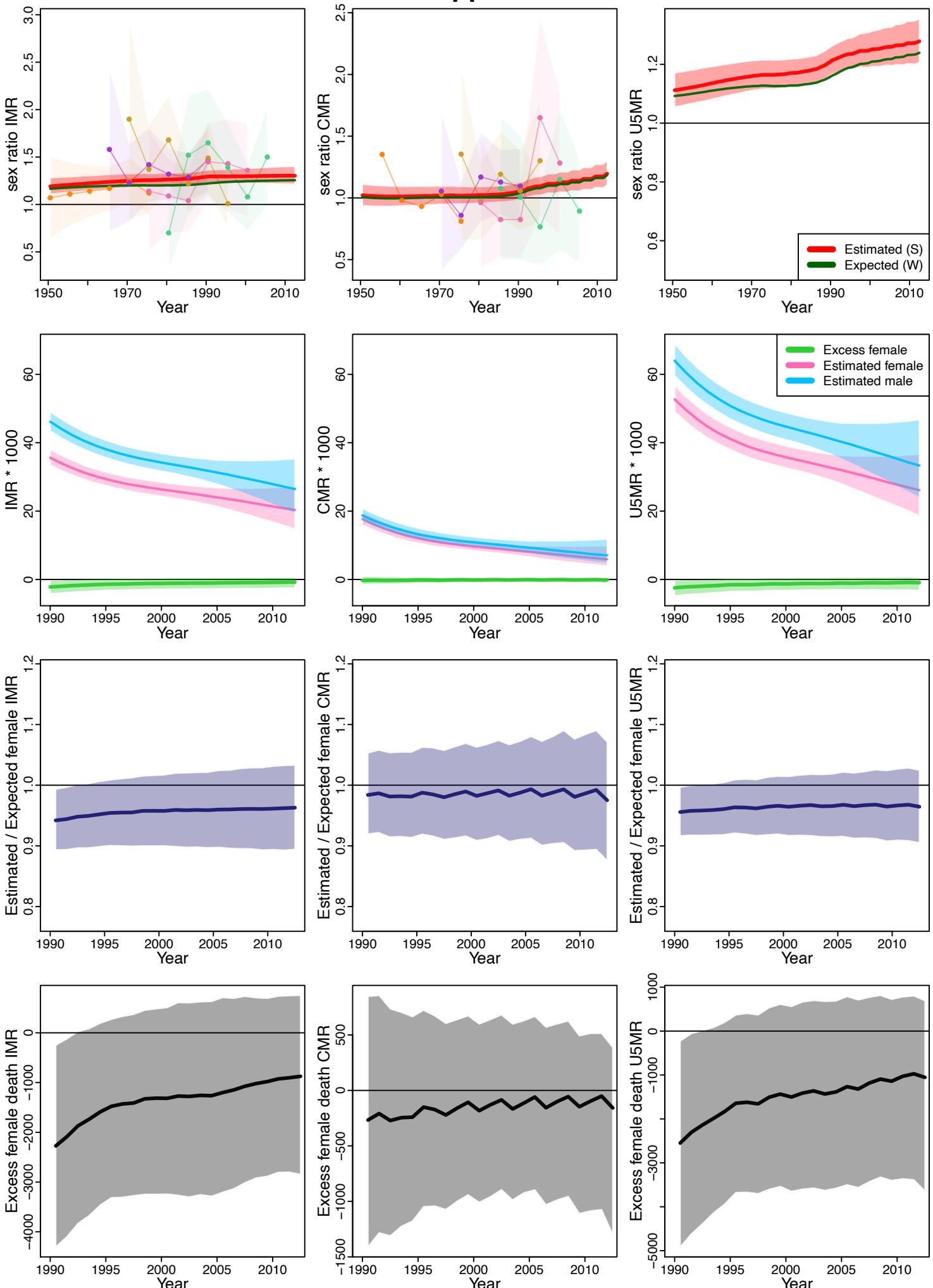
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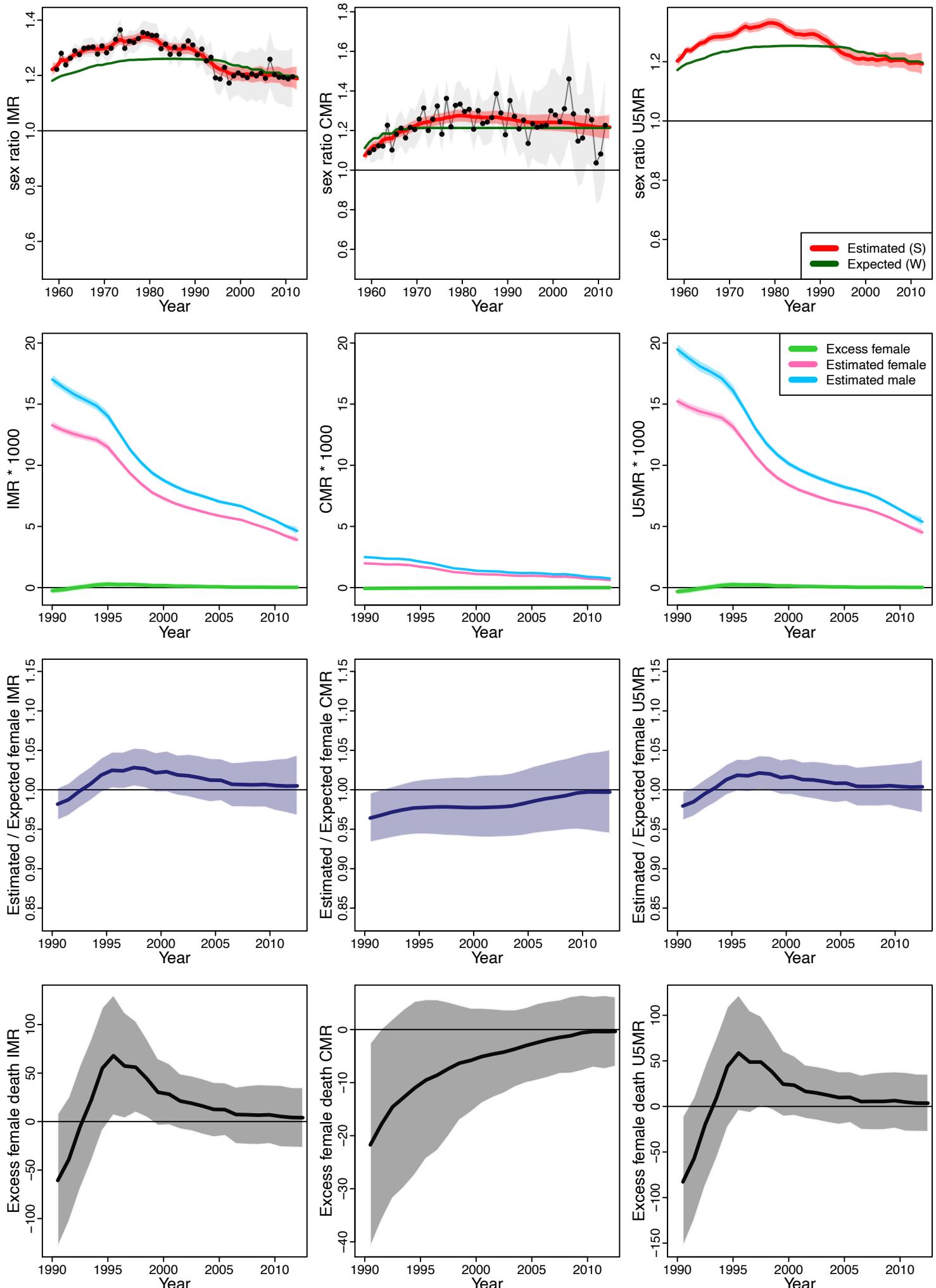
# Peru



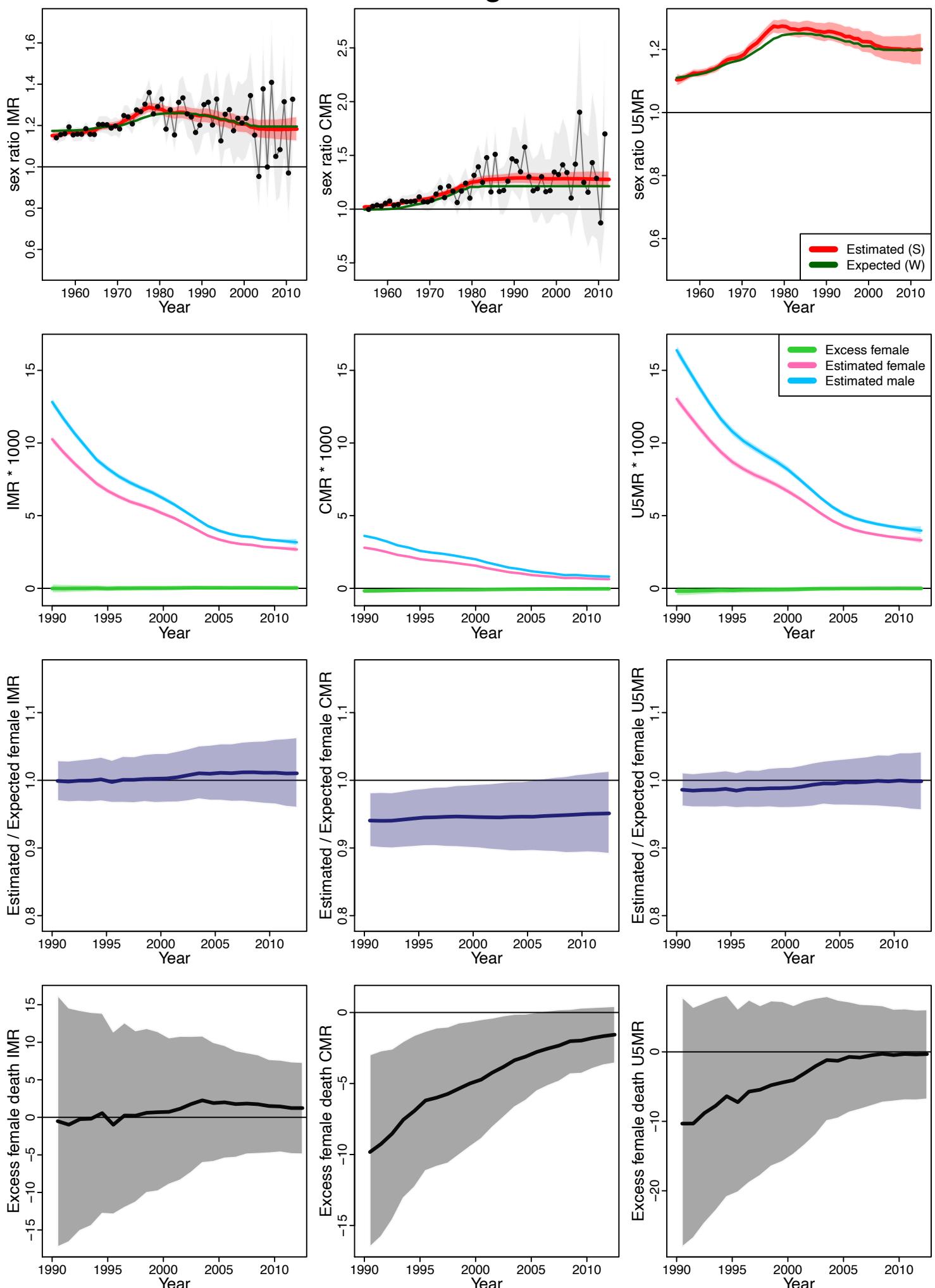
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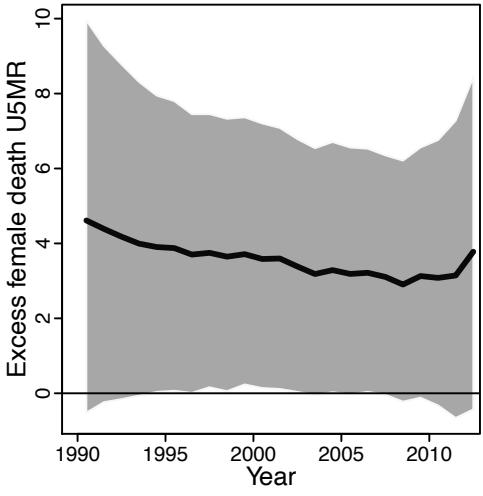
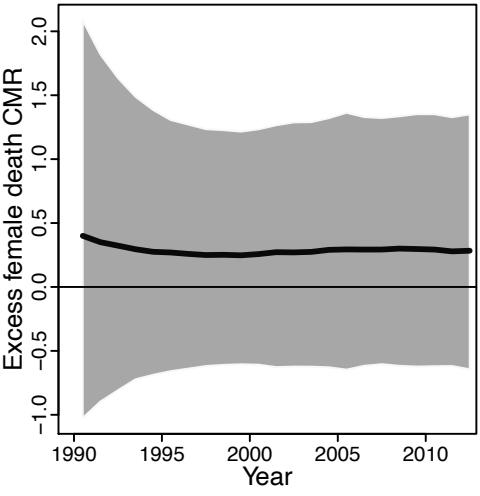
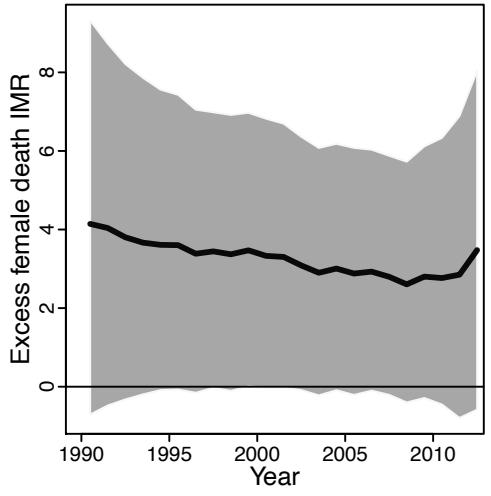
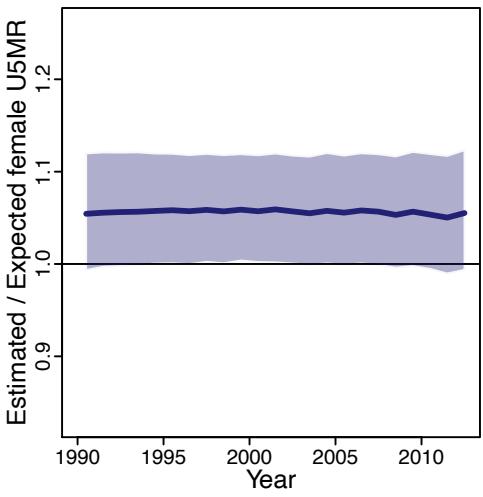
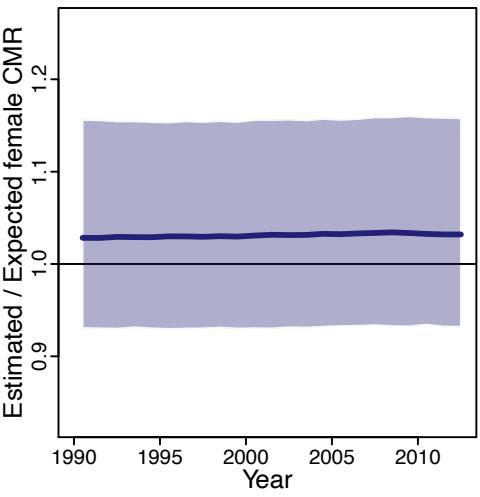
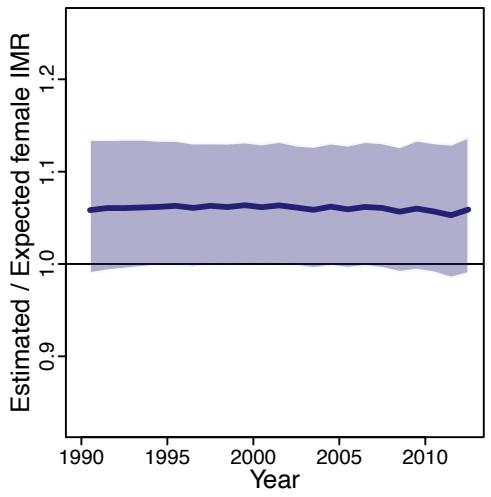
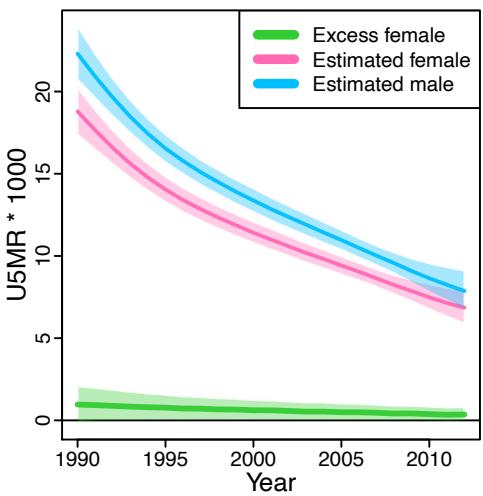
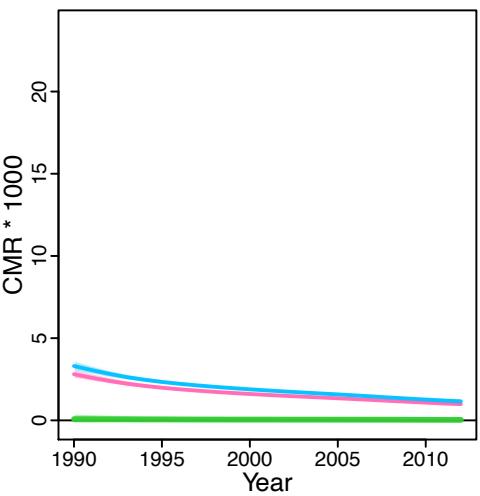
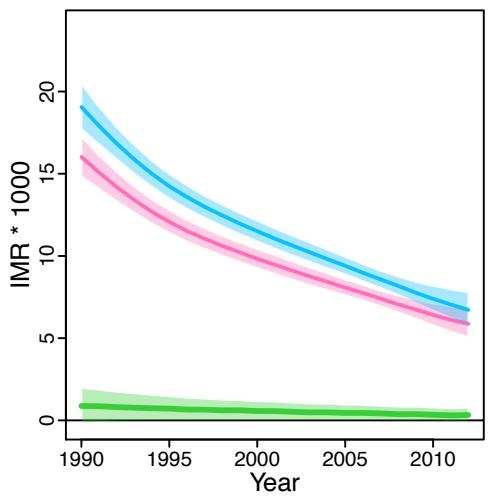
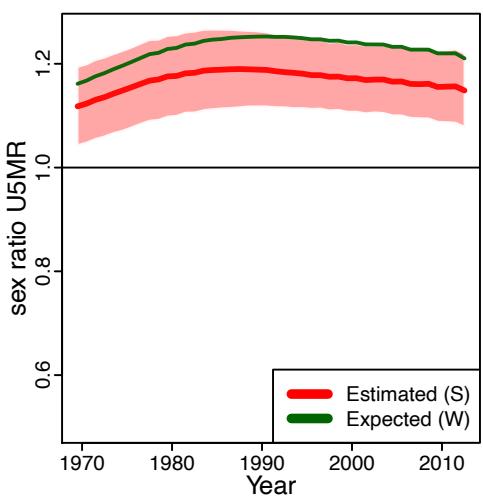
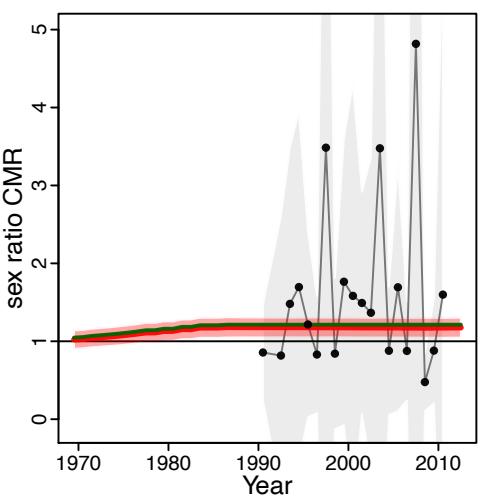
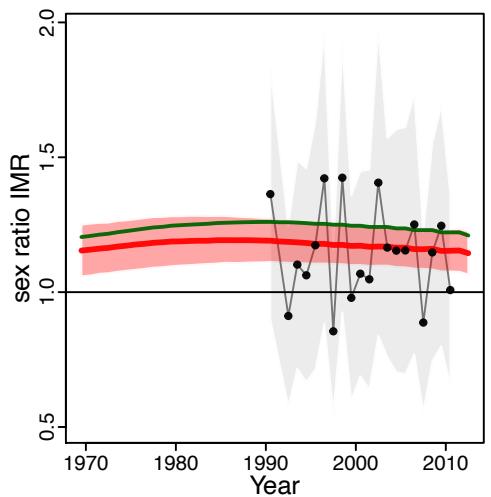
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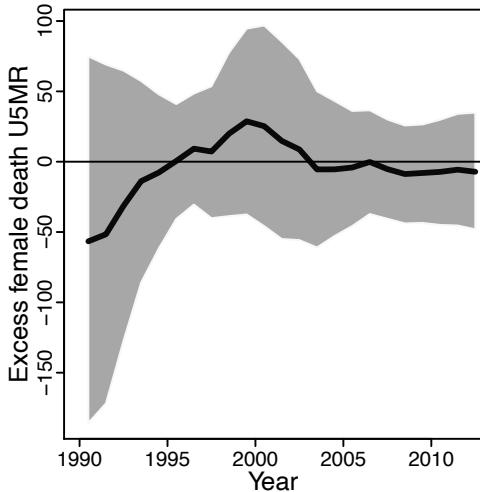
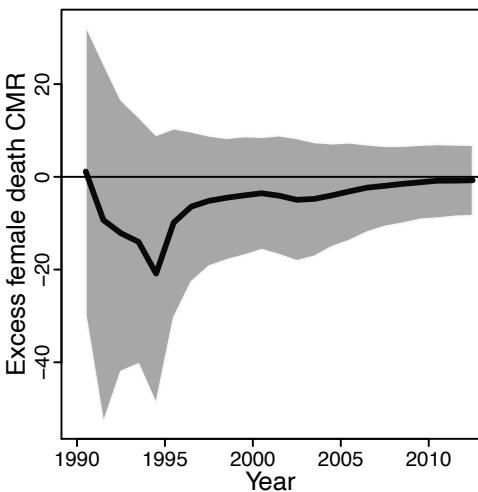
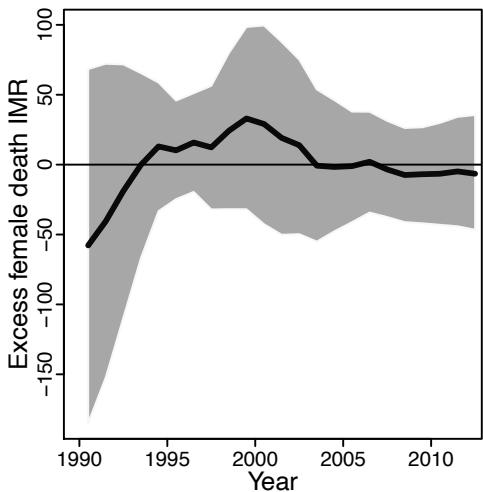
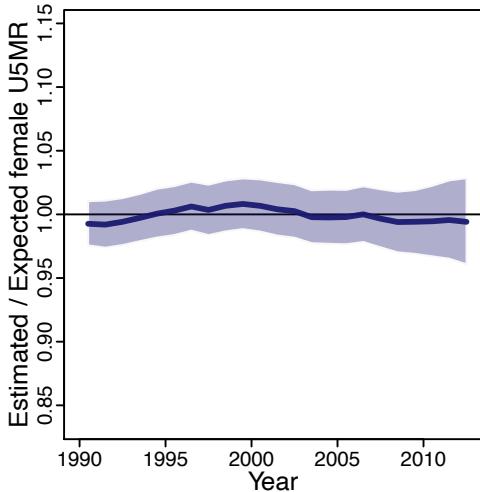
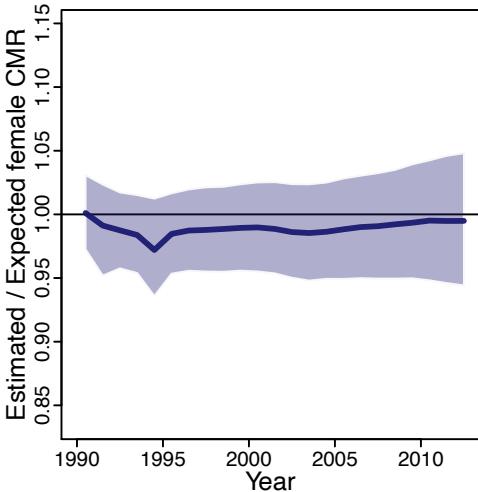
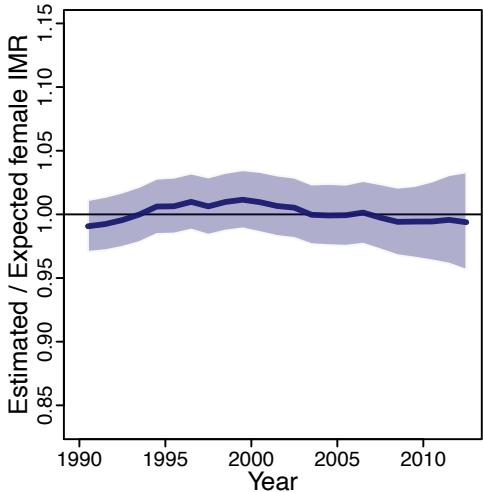
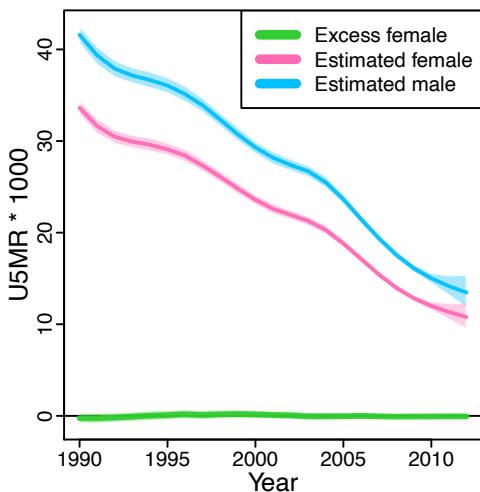
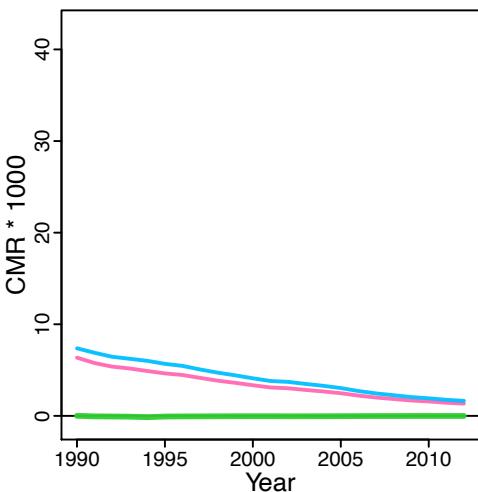
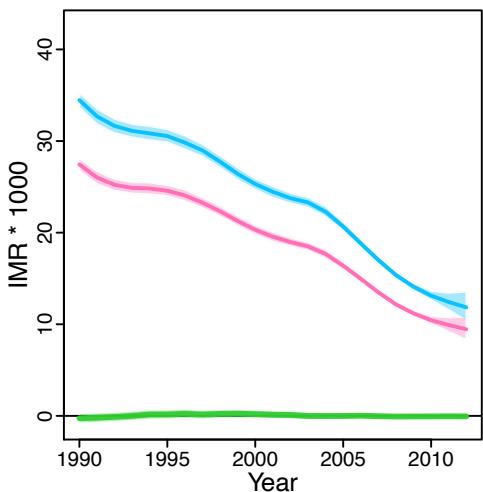
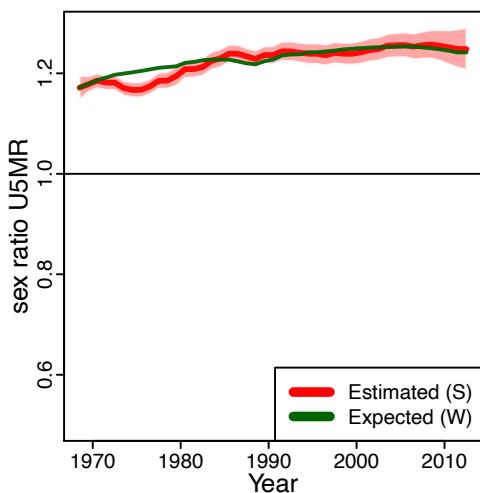
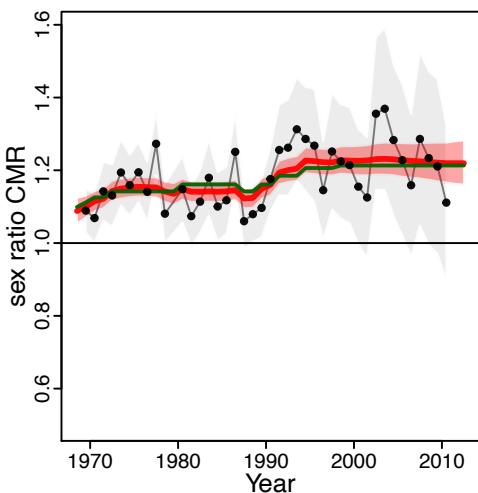
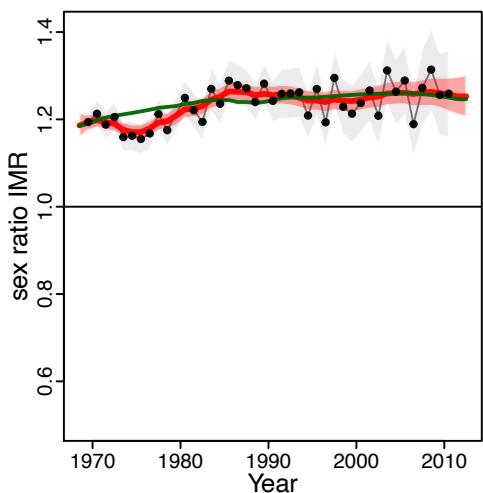
# Portugal



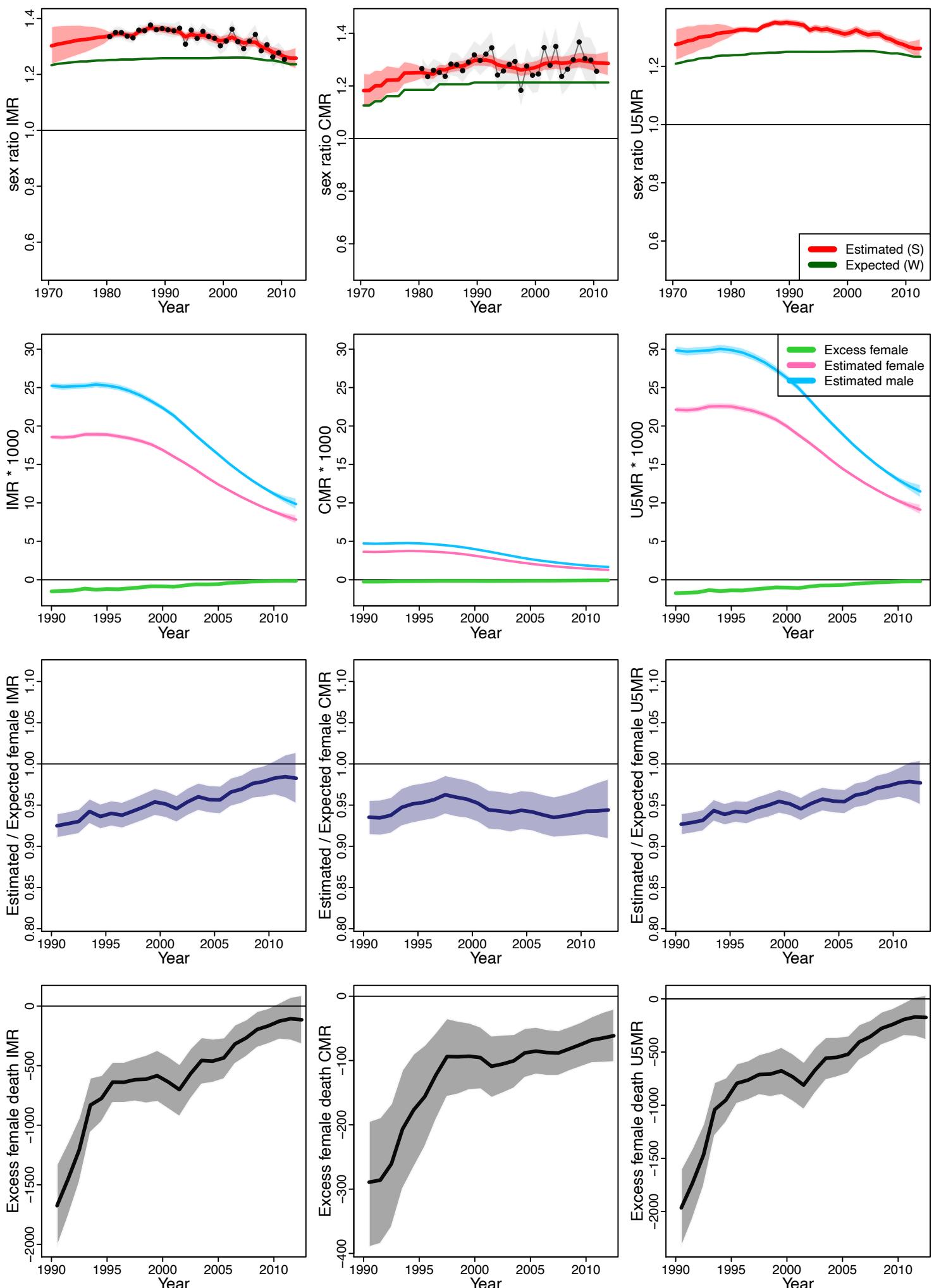
# Qatar



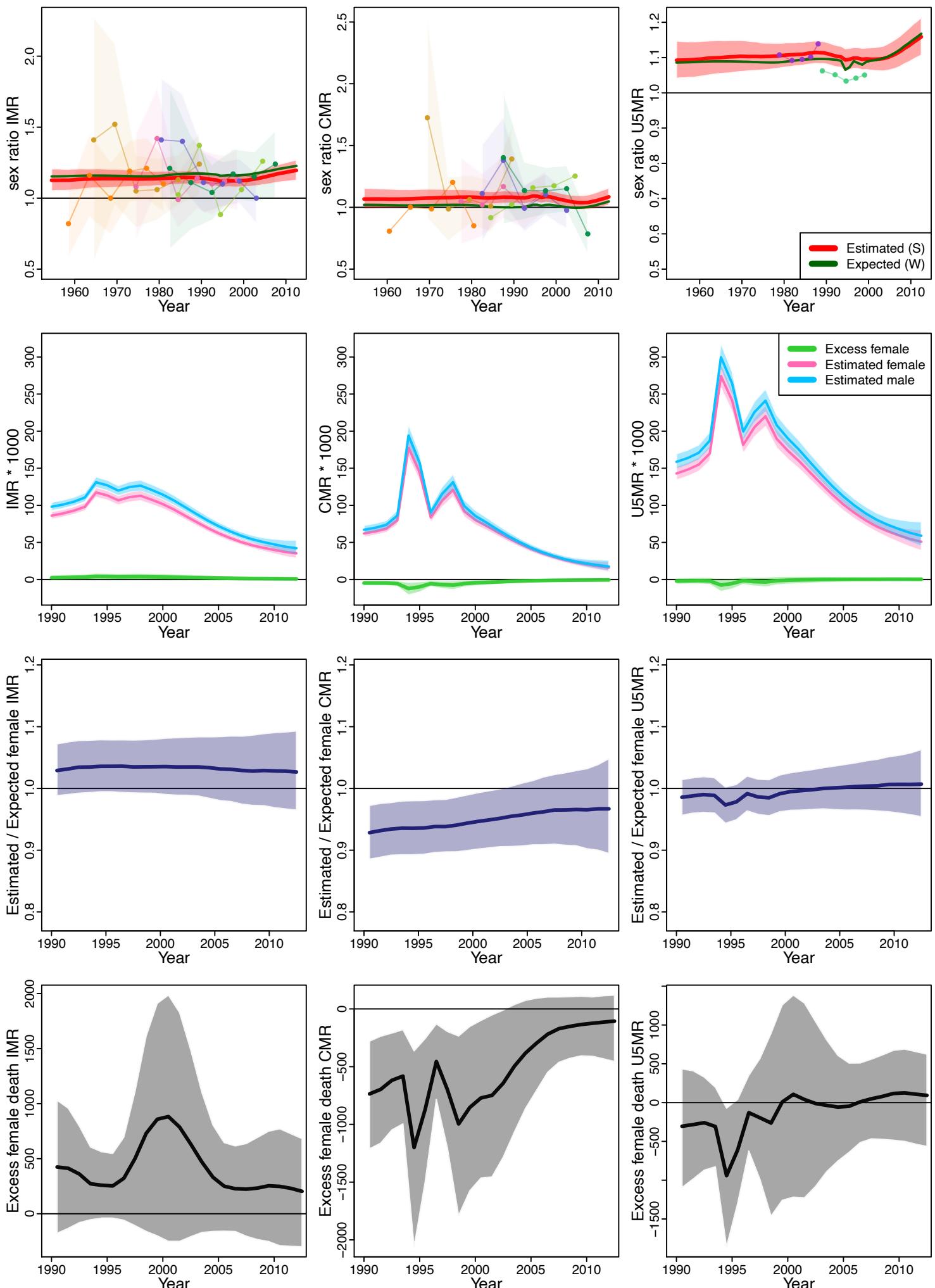
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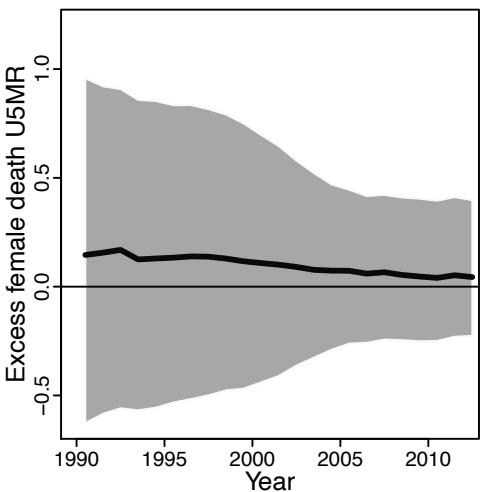
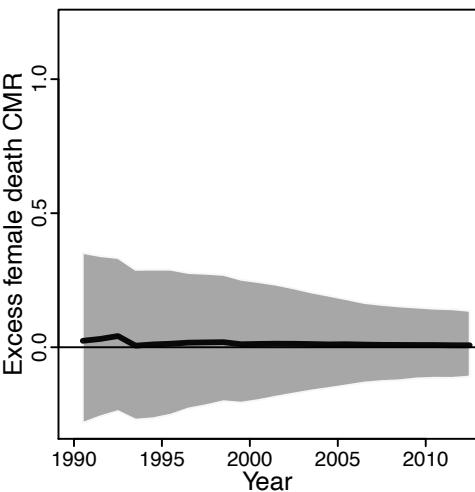
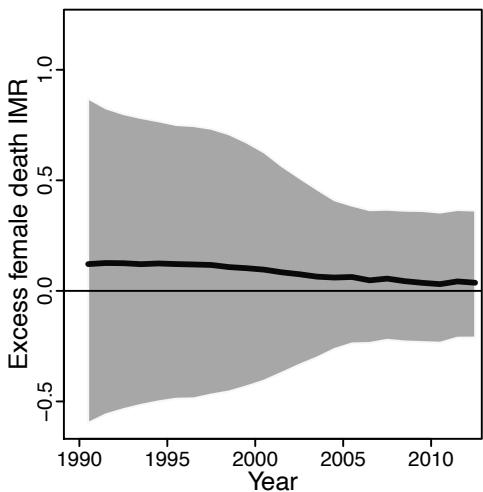
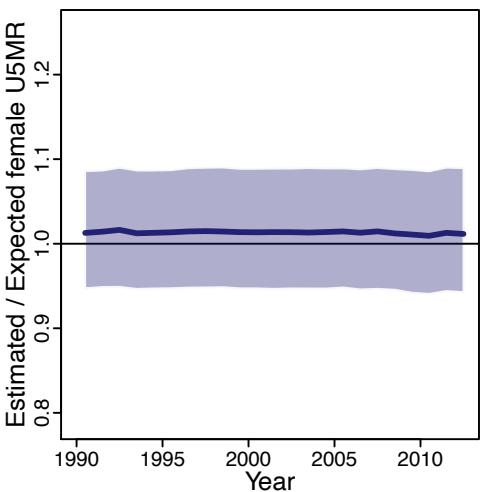
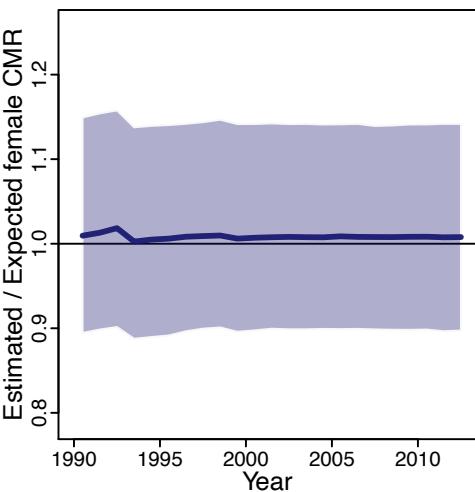
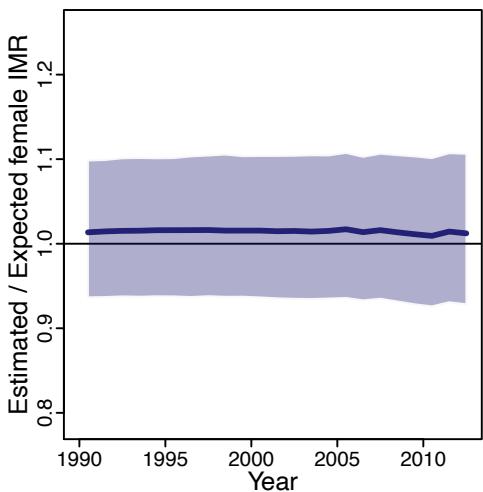
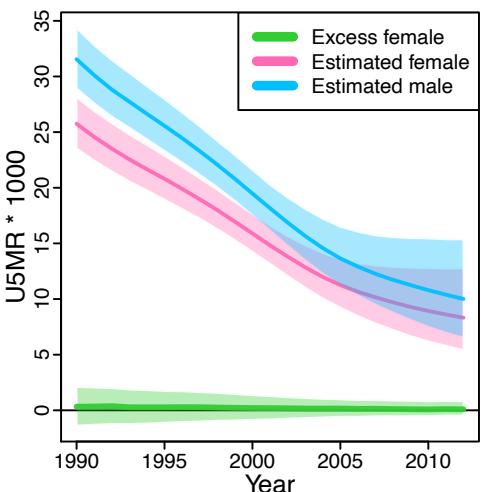
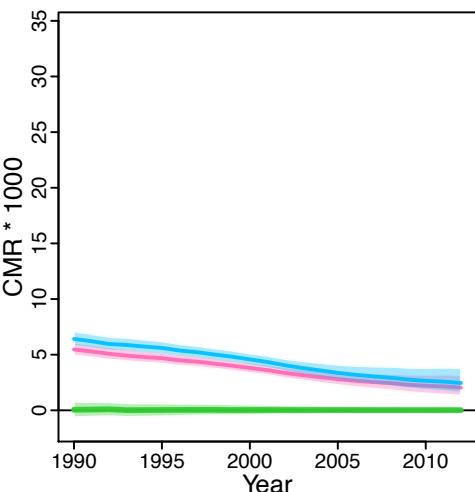
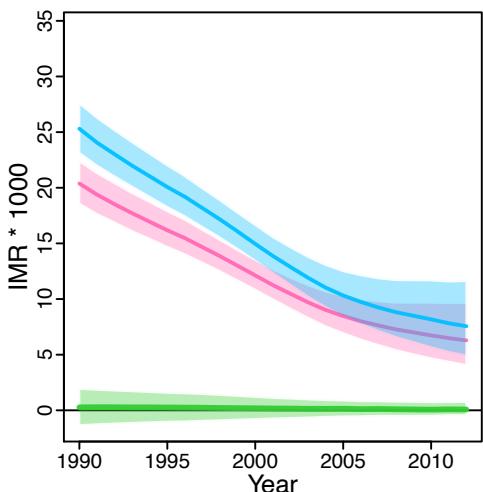
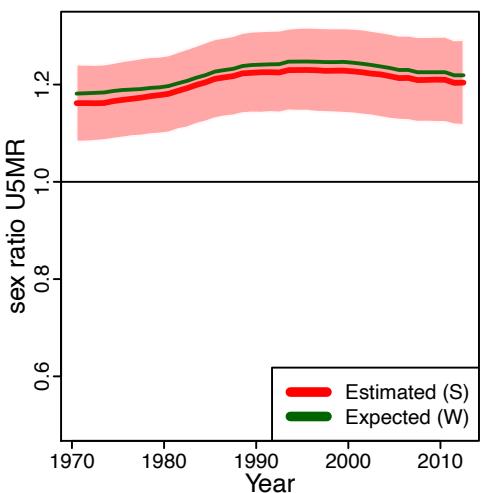
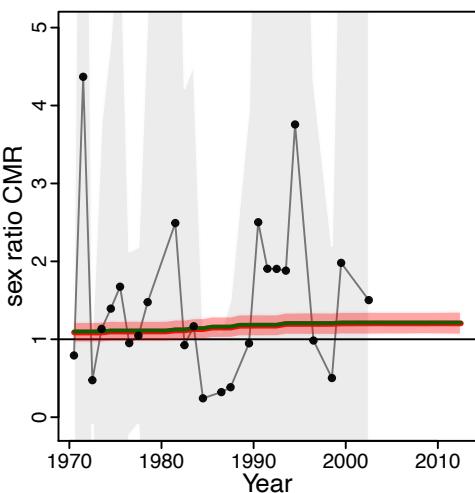
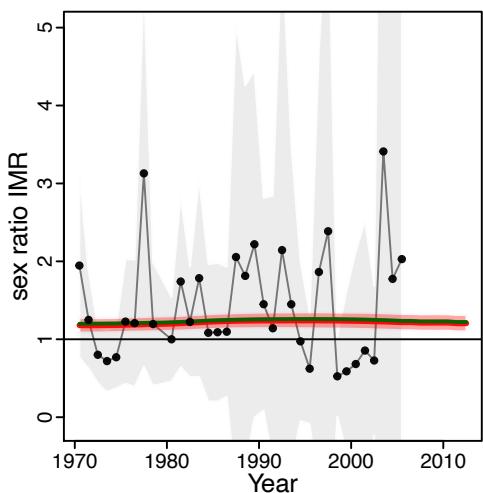
# Russian Federation



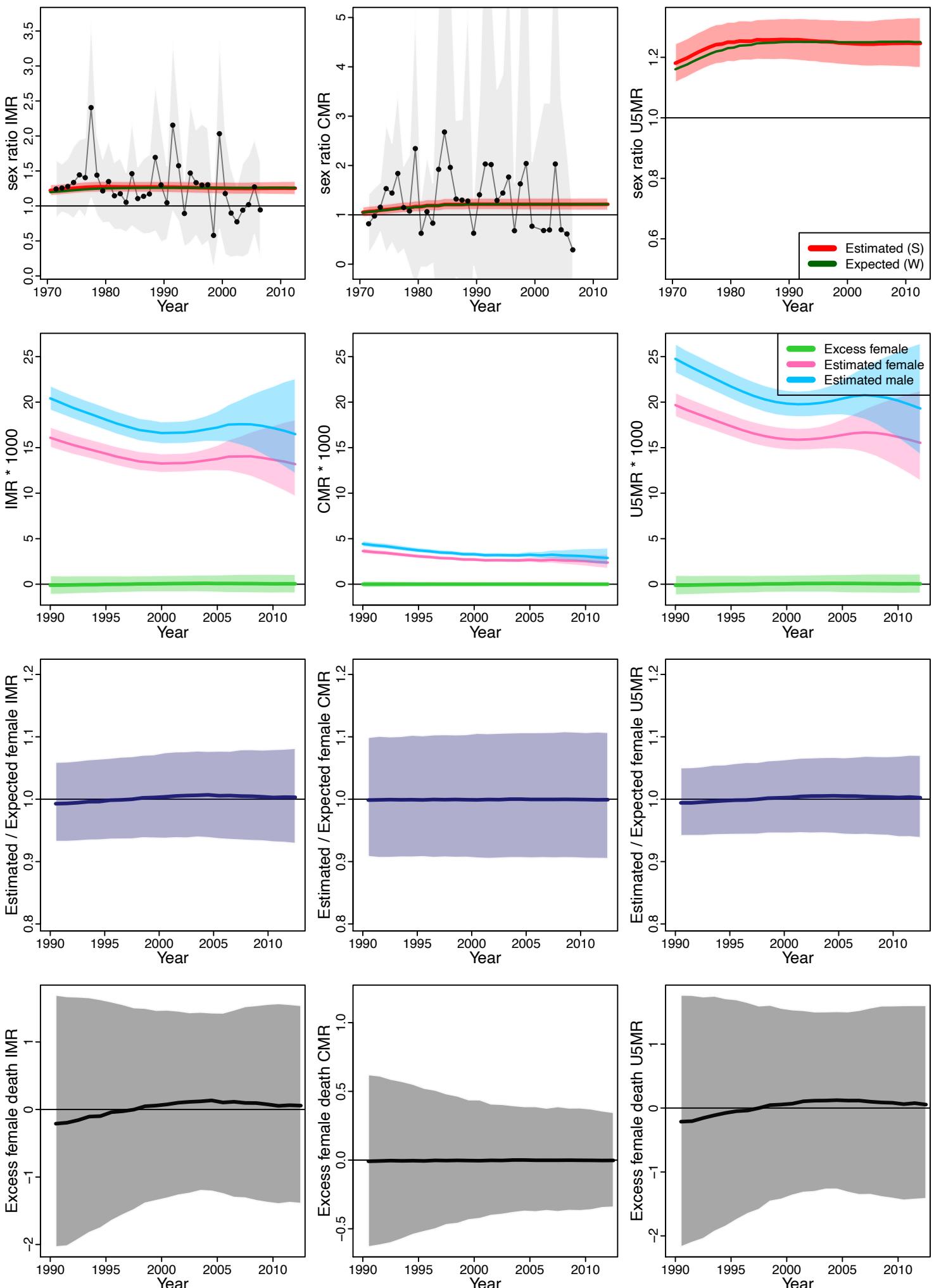
# Rwanda



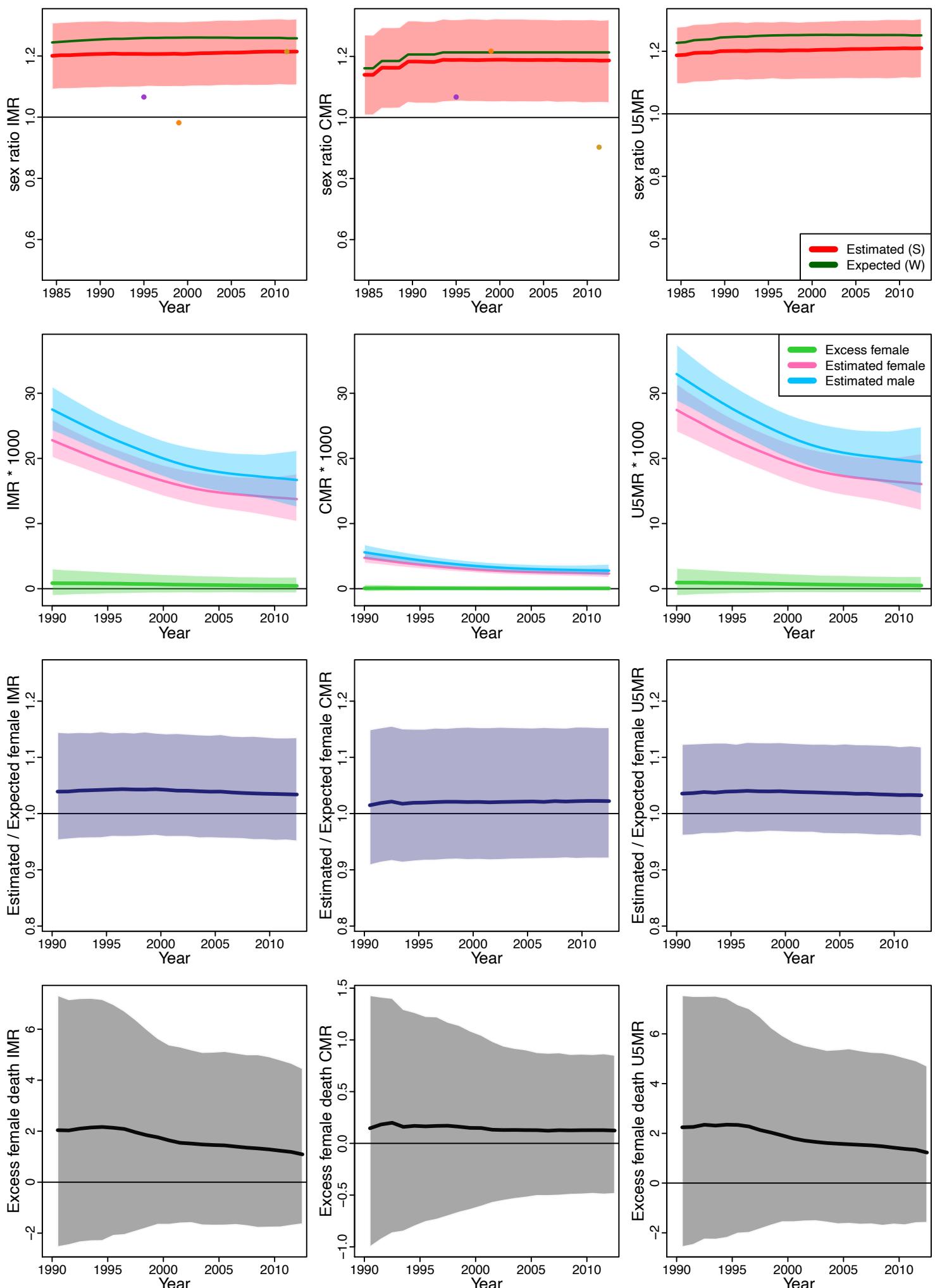
# Saint Kitts and Nevis



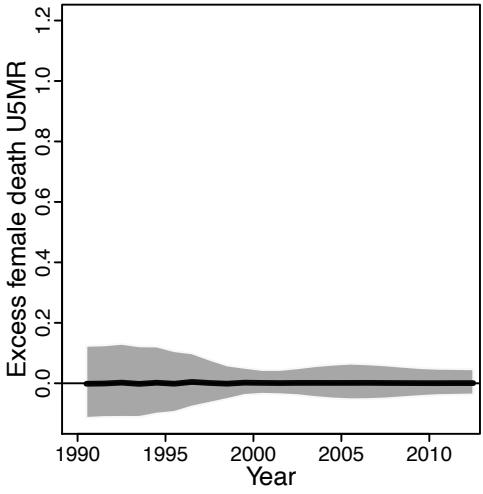
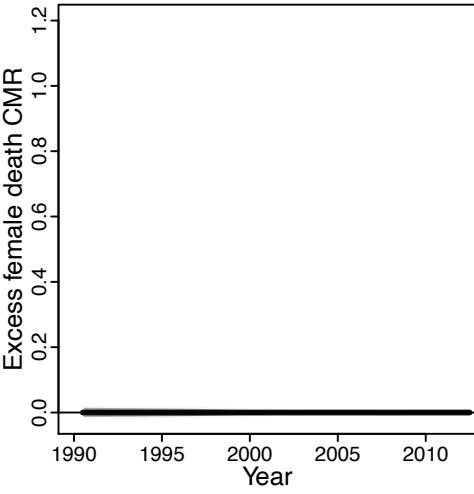
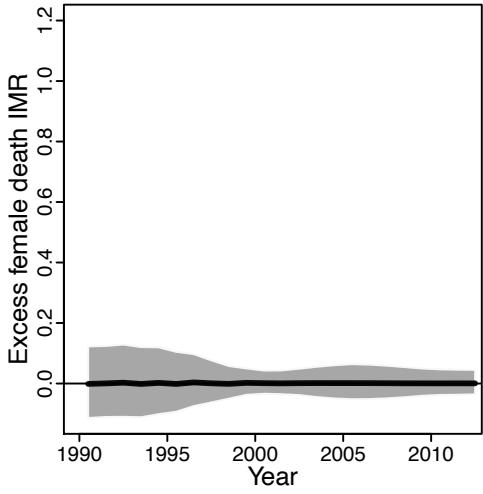
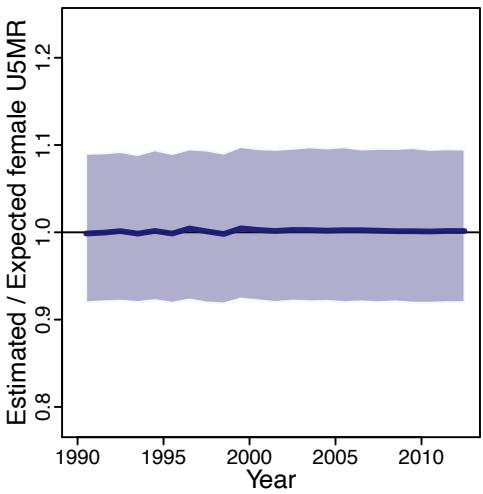
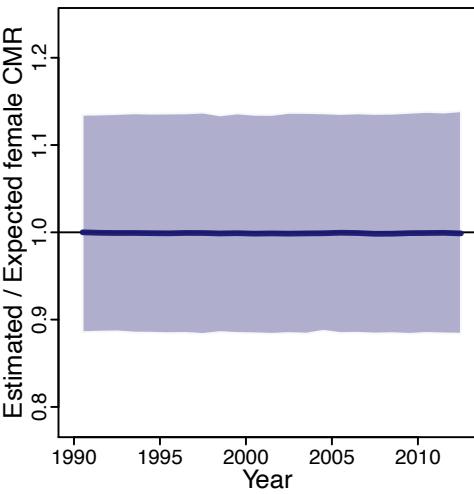
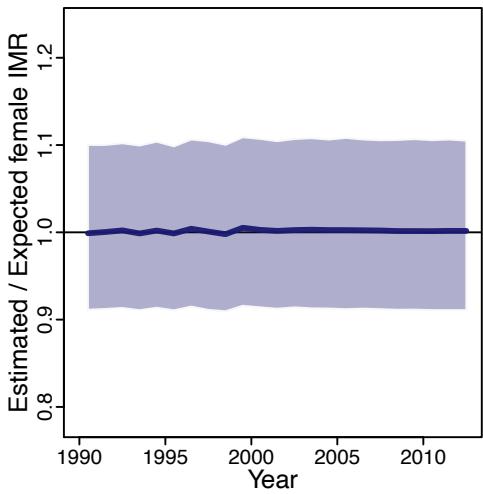
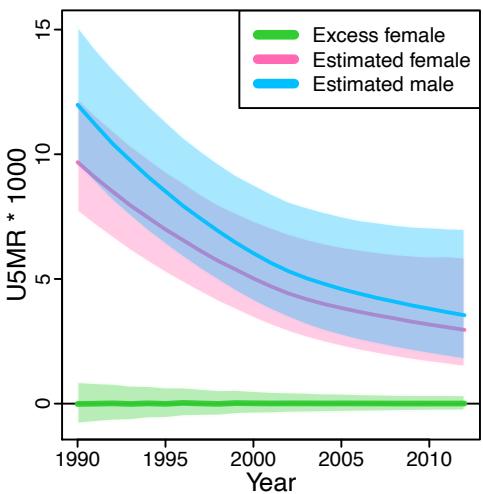
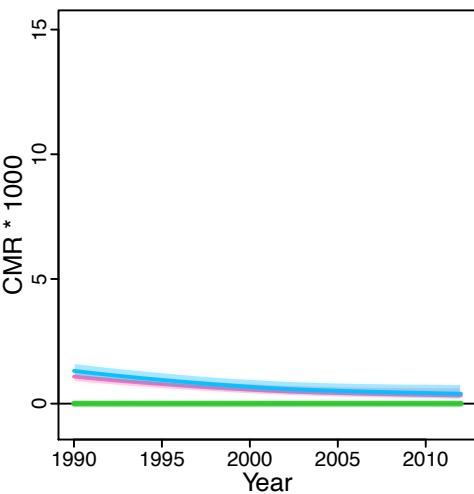
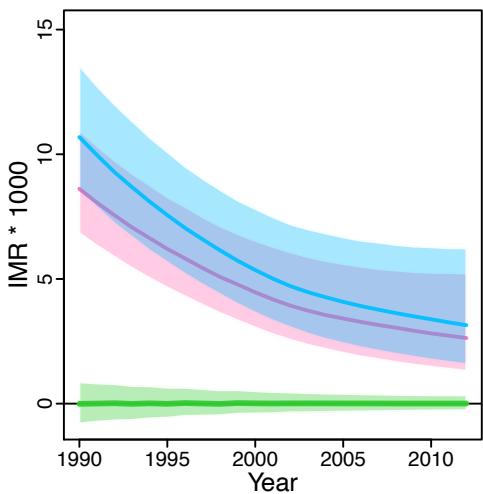
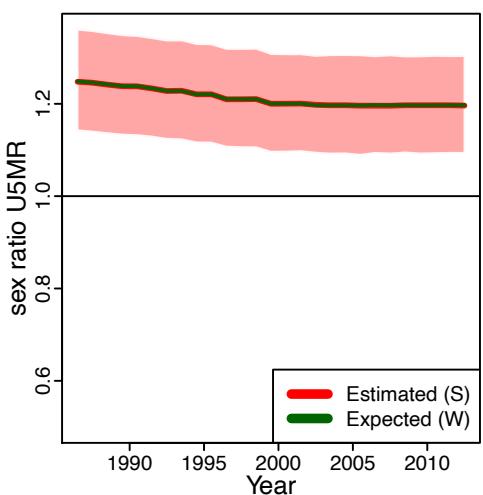
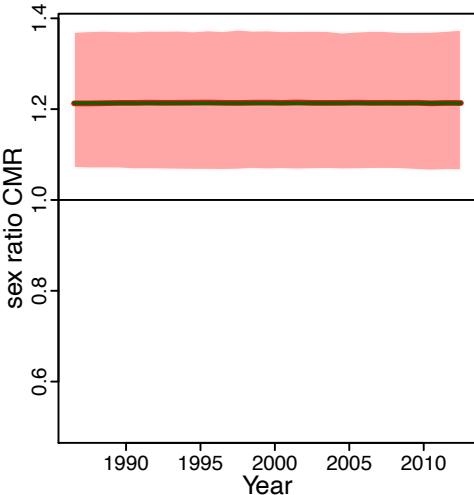
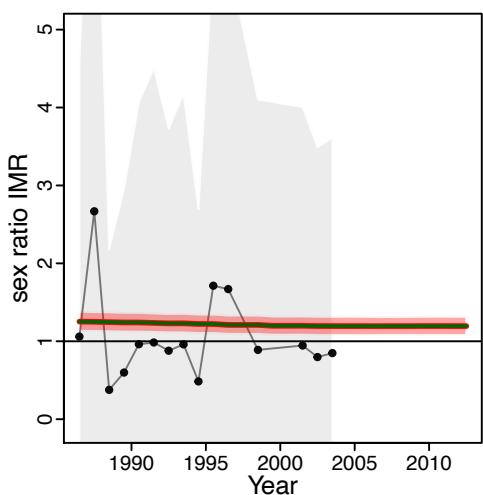
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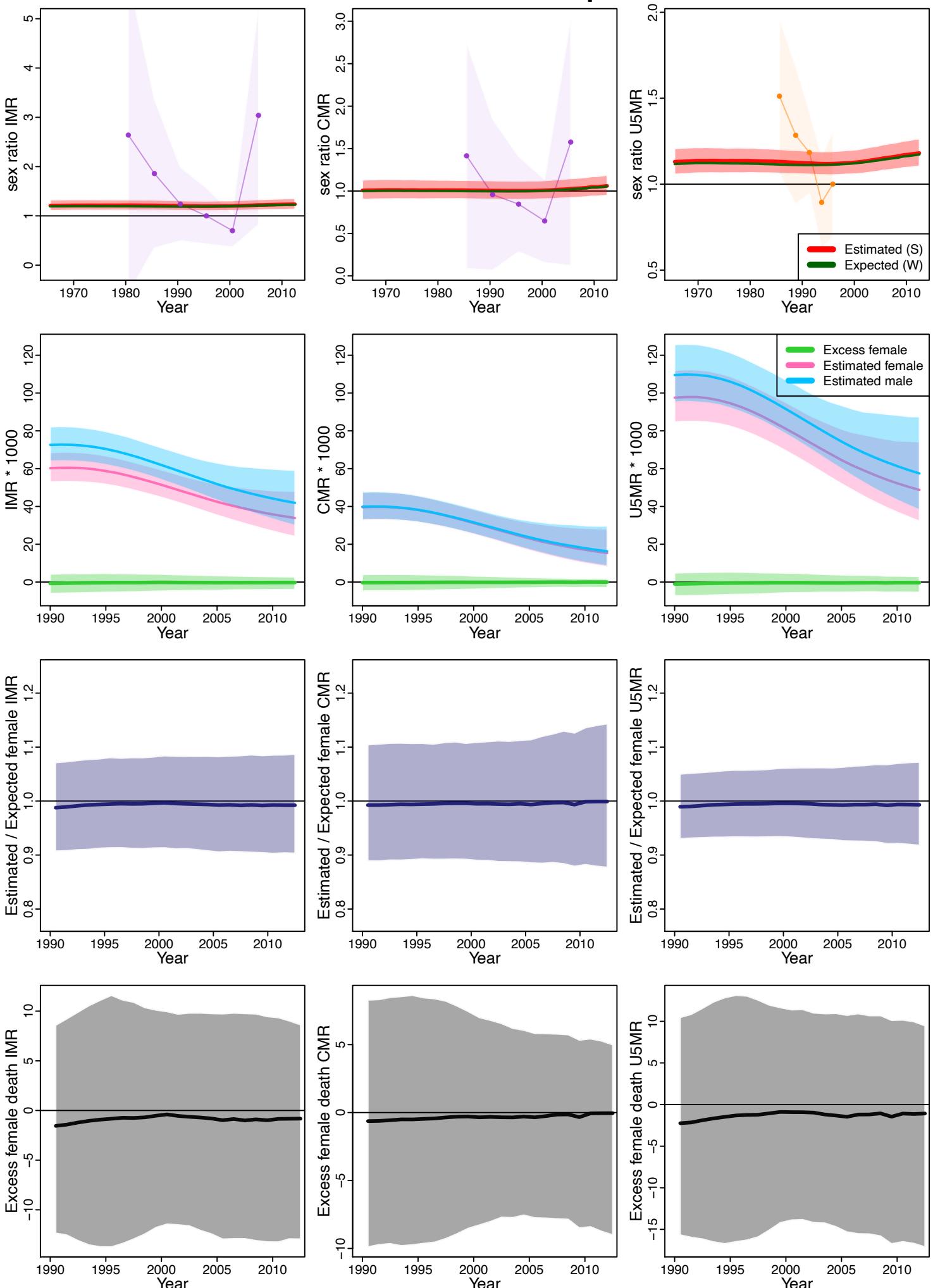
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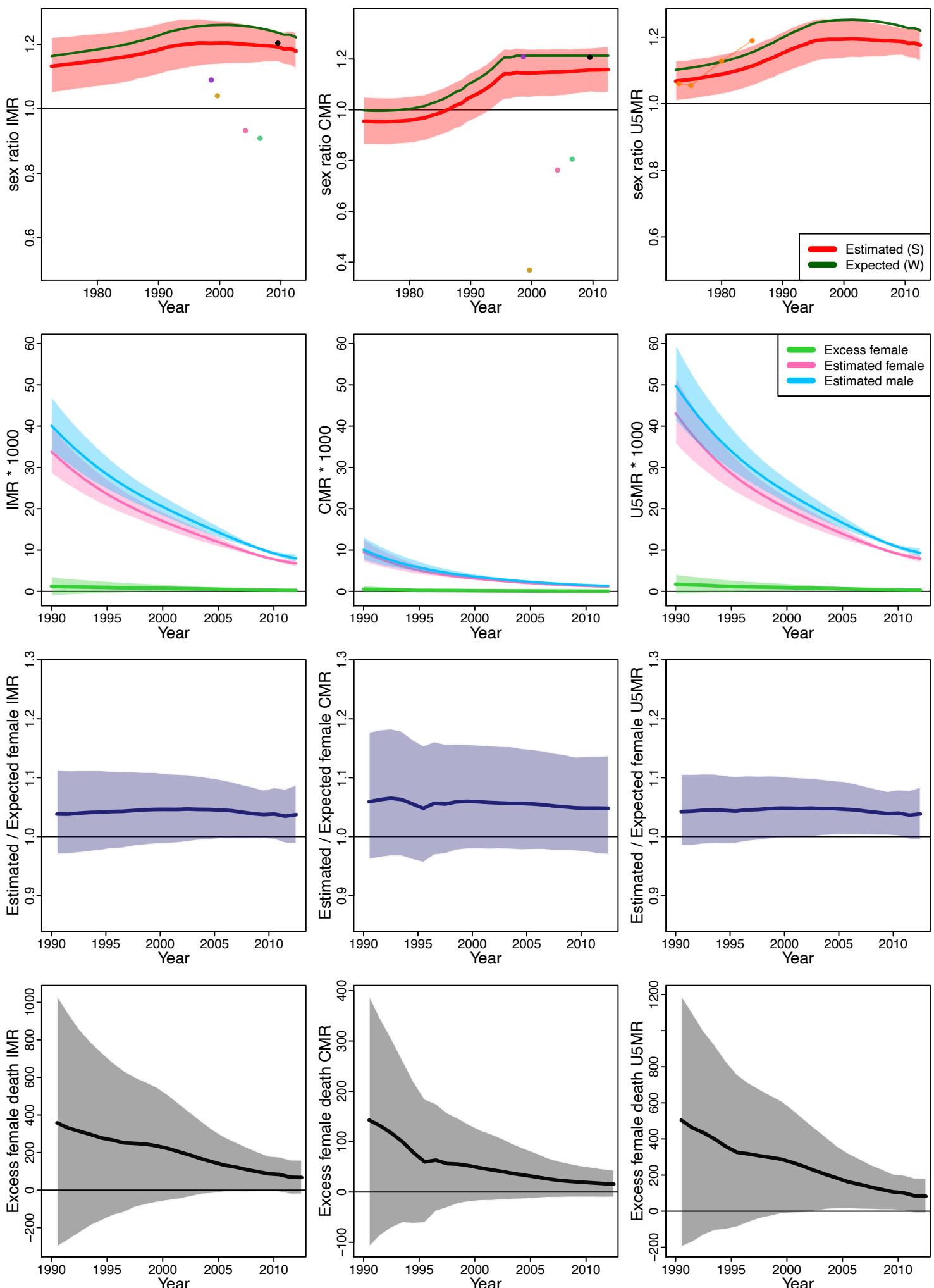
# San Marino



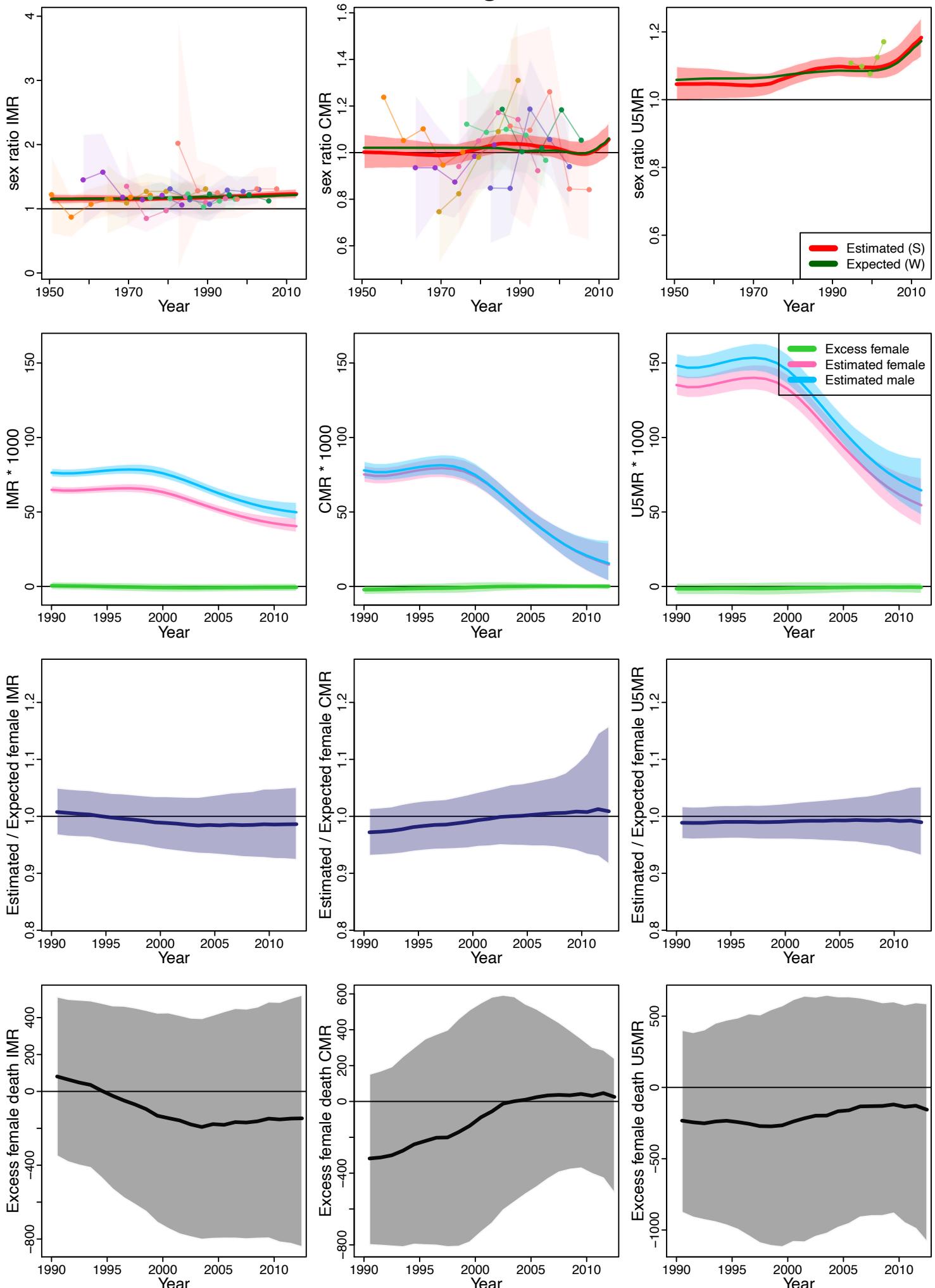
# Sao Tome and Principe



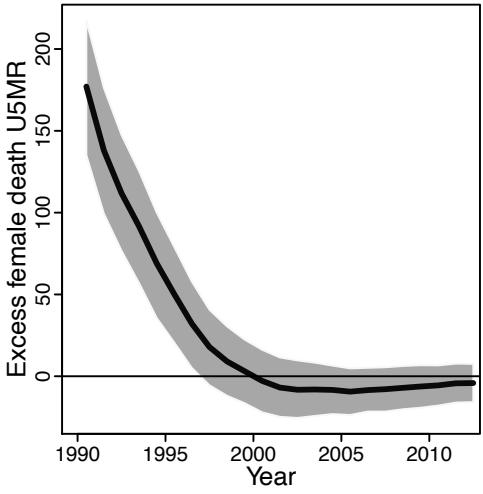
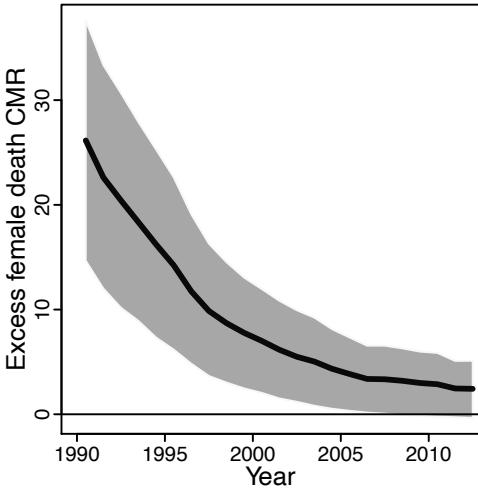
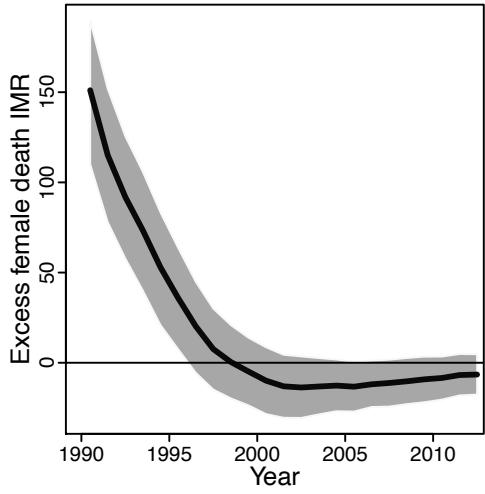
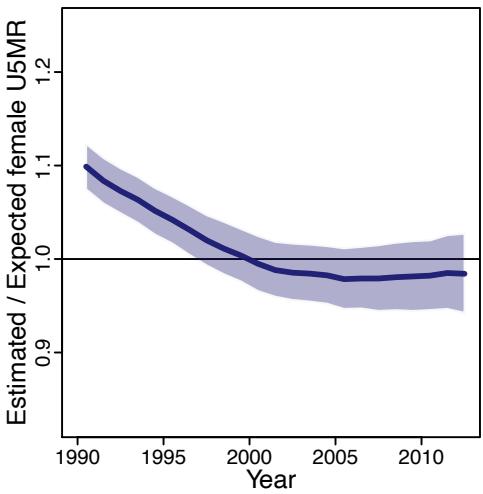
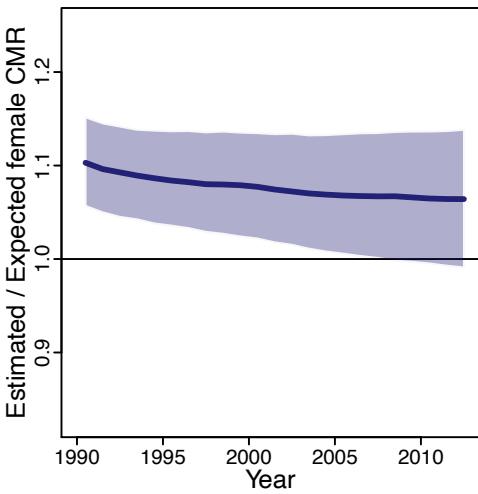
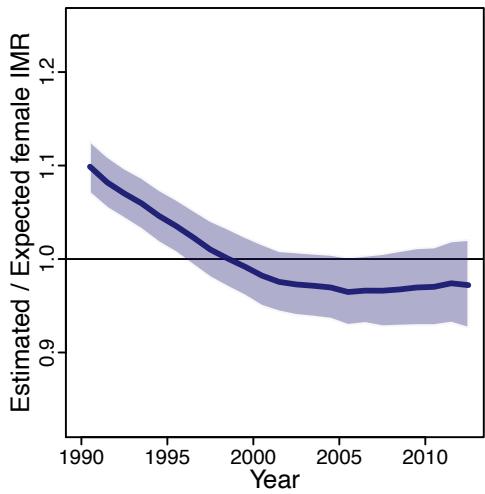
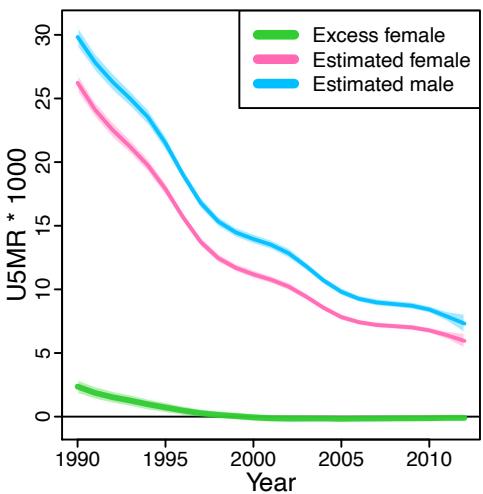
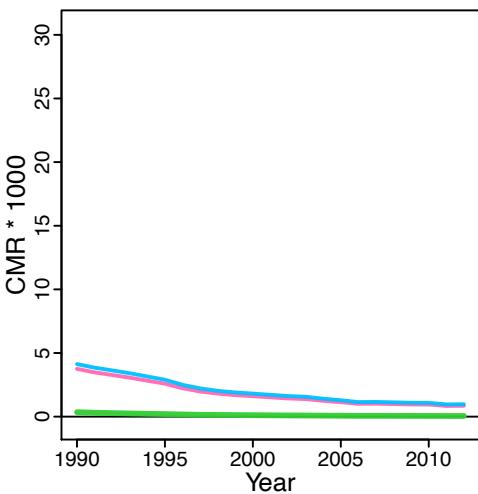
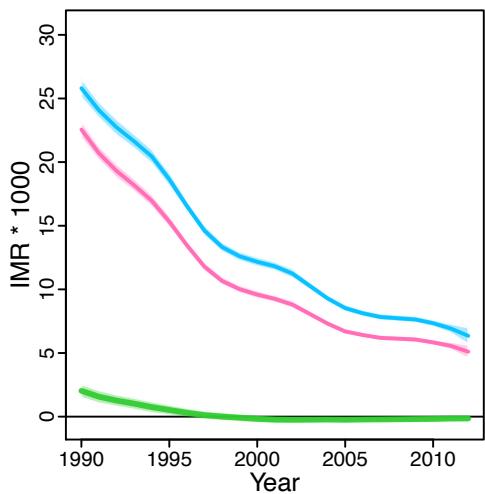
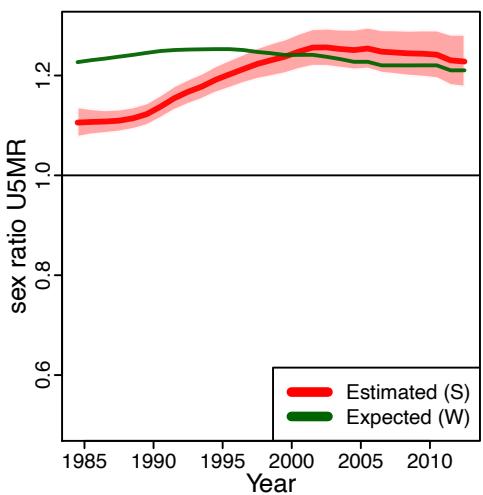
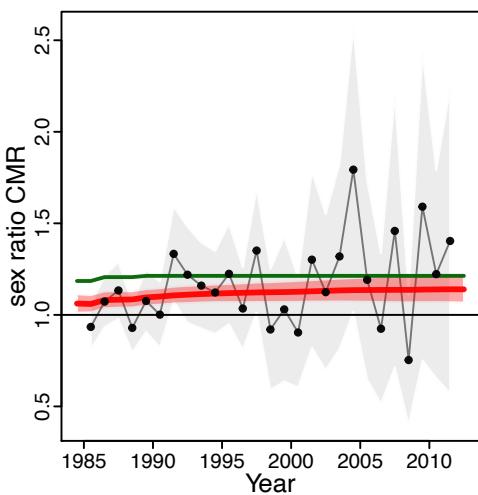
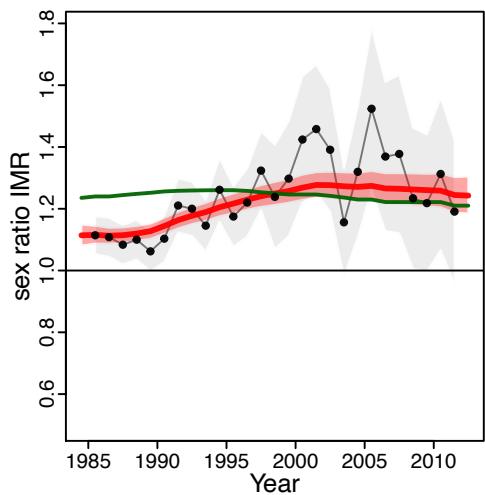
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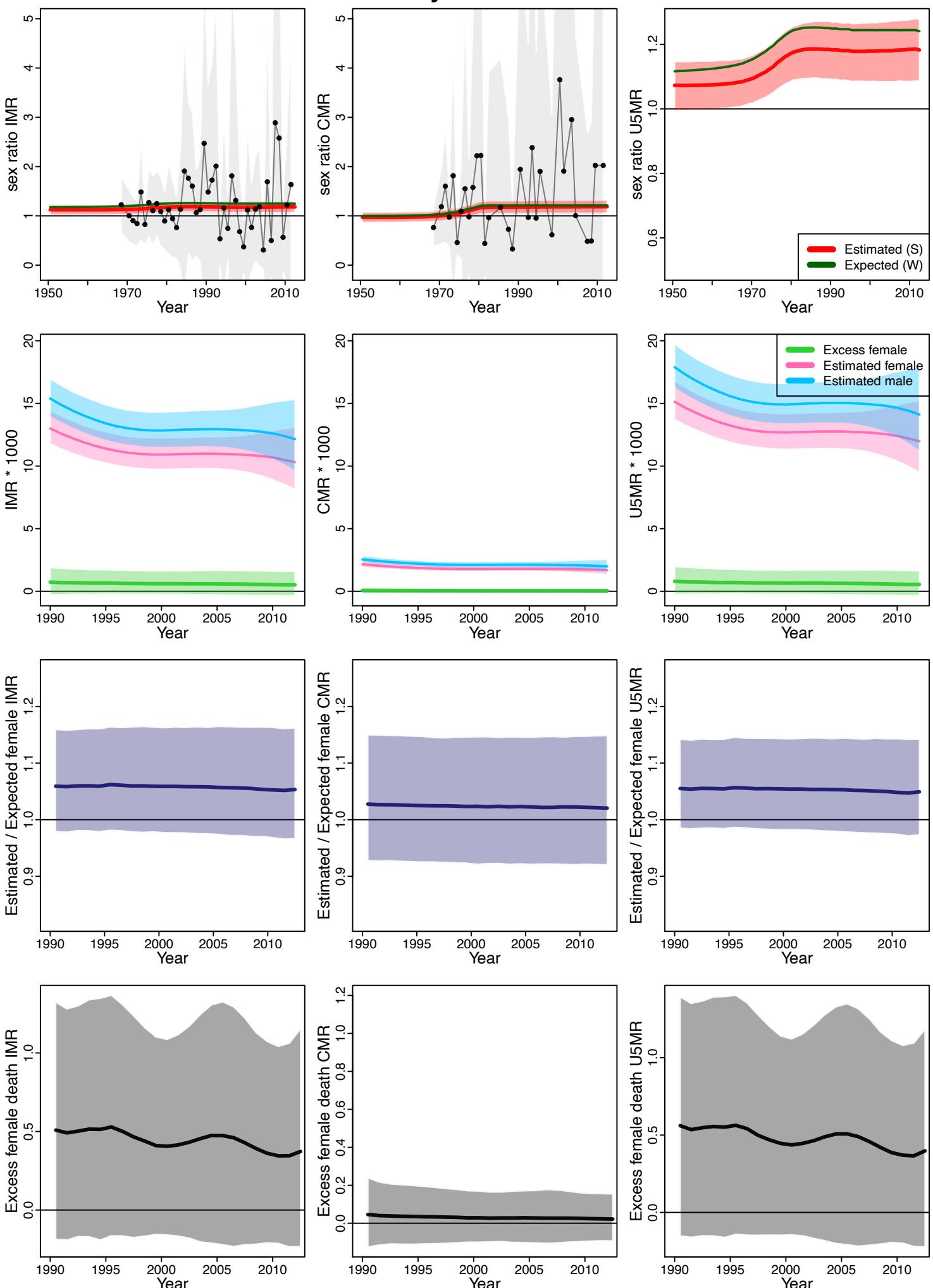
# Senegal



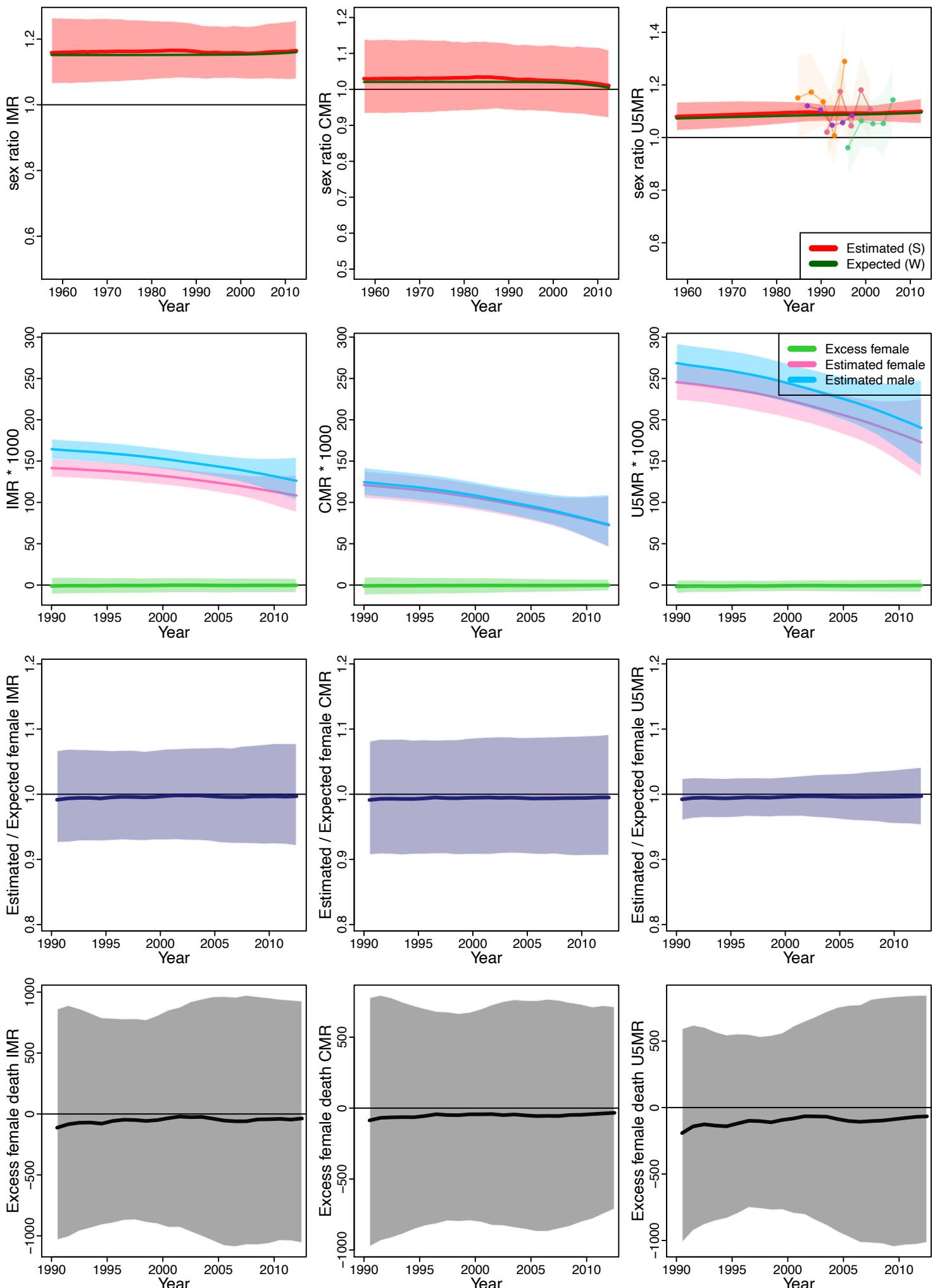
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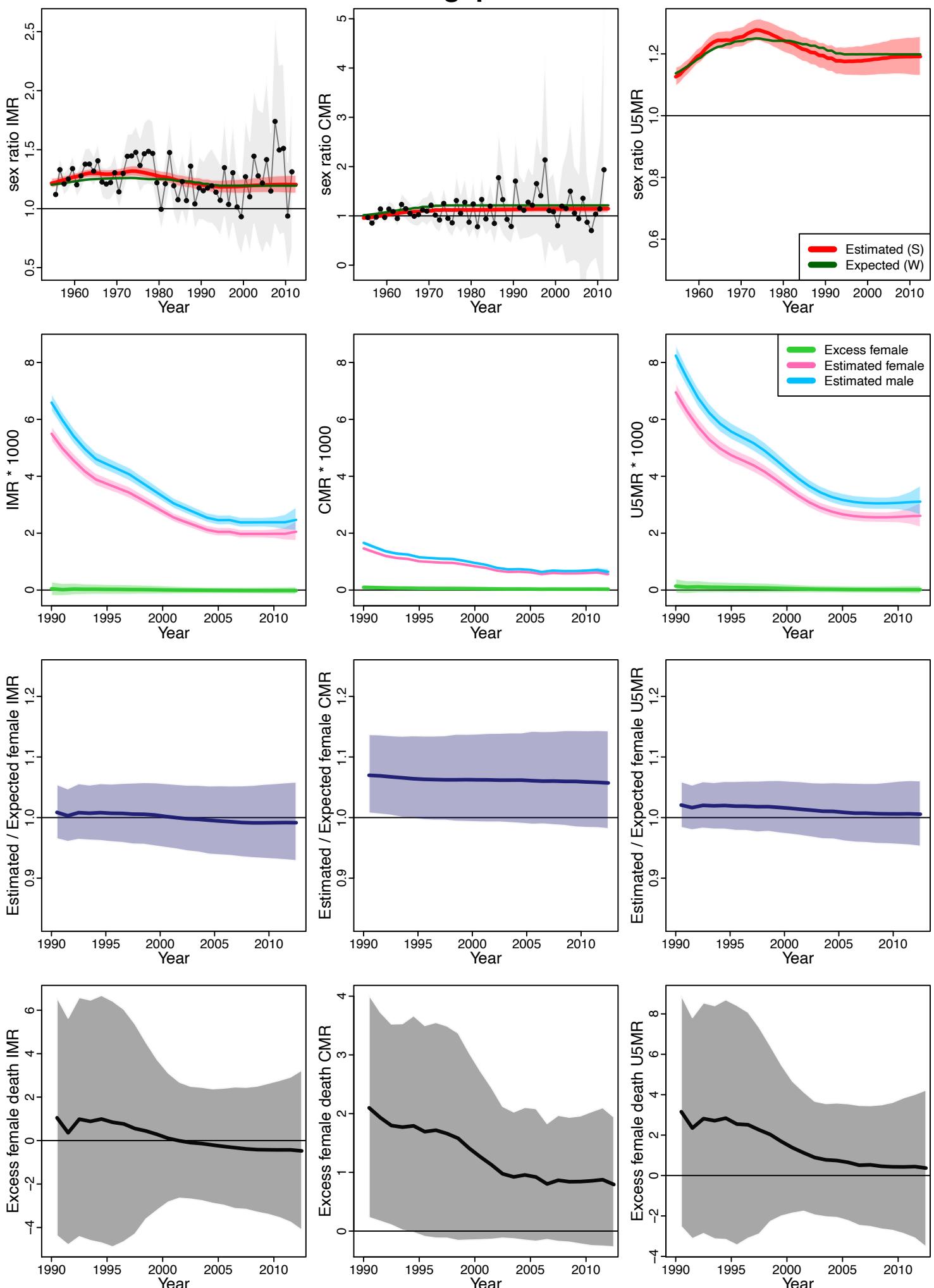
# Seychelles



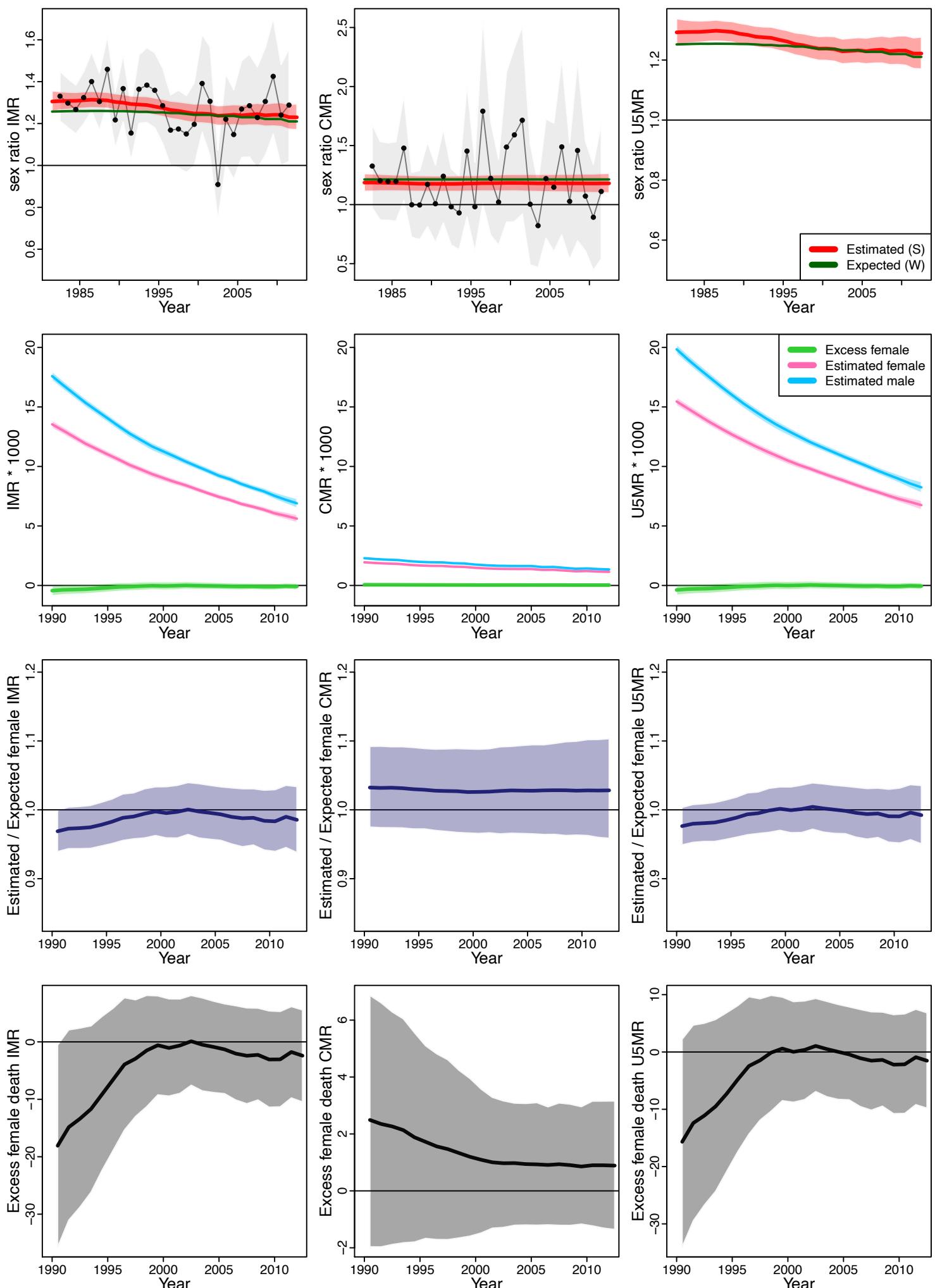
# Sierra Leone



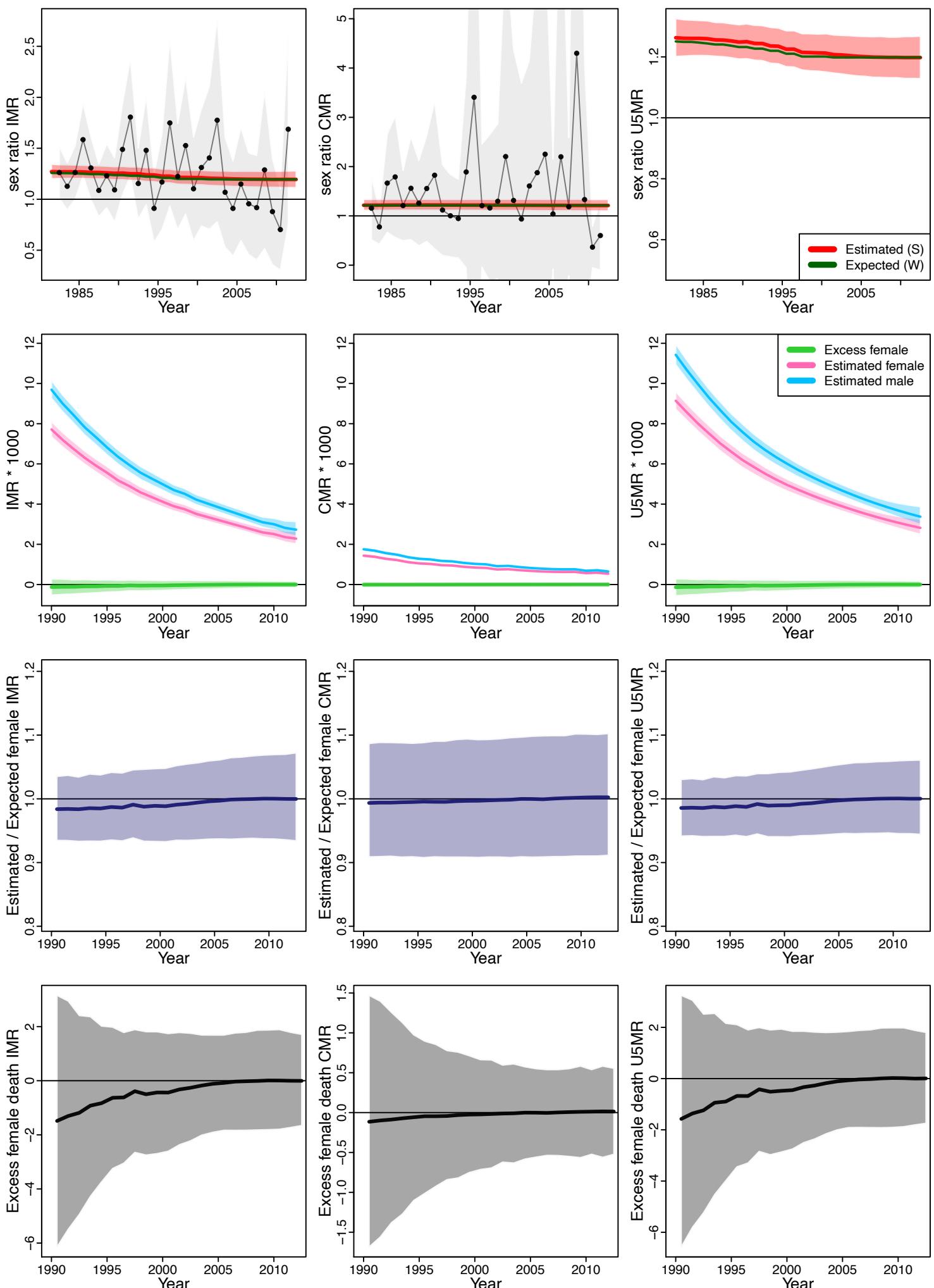
# Singapore



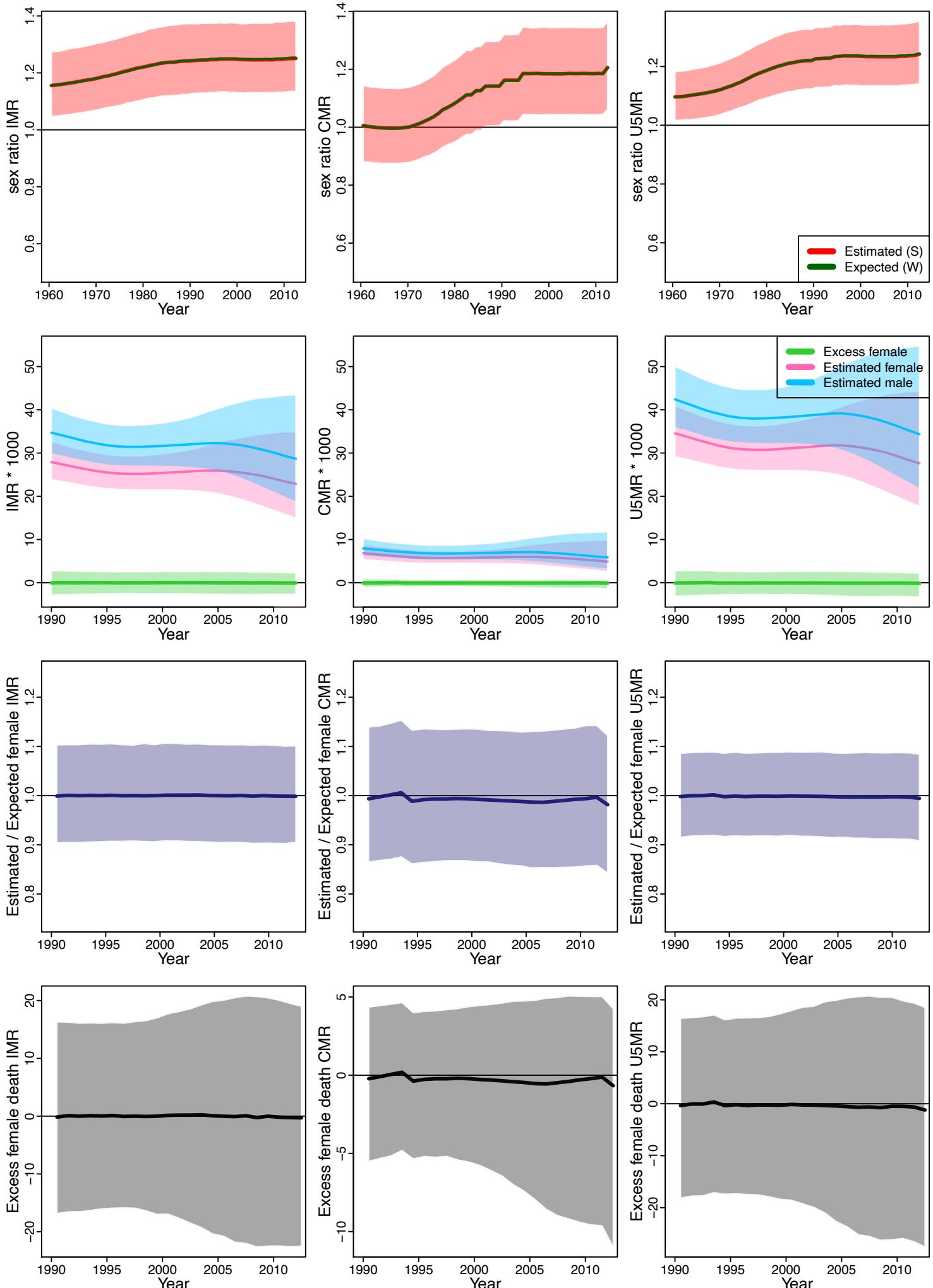
# Slovakia



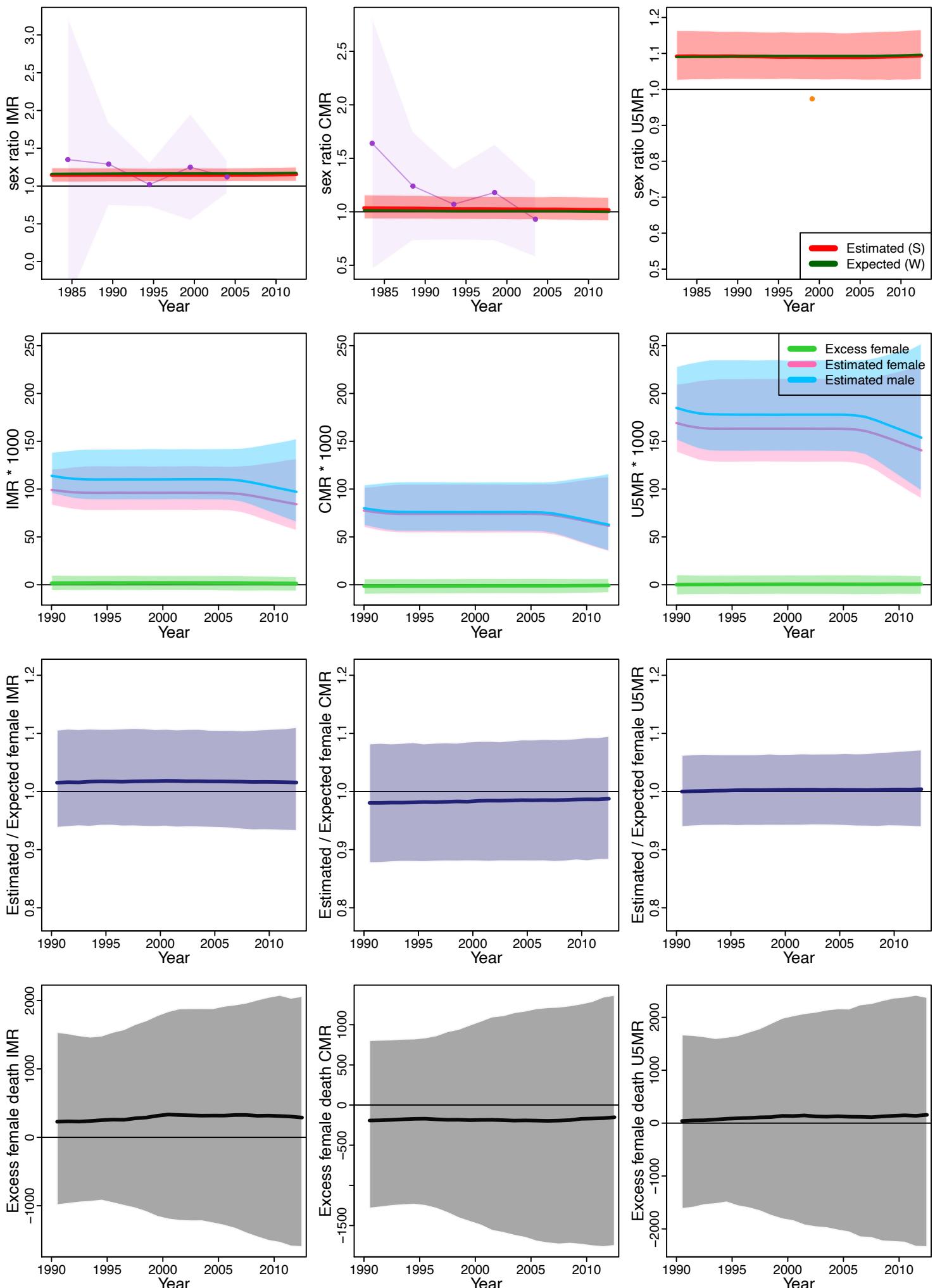
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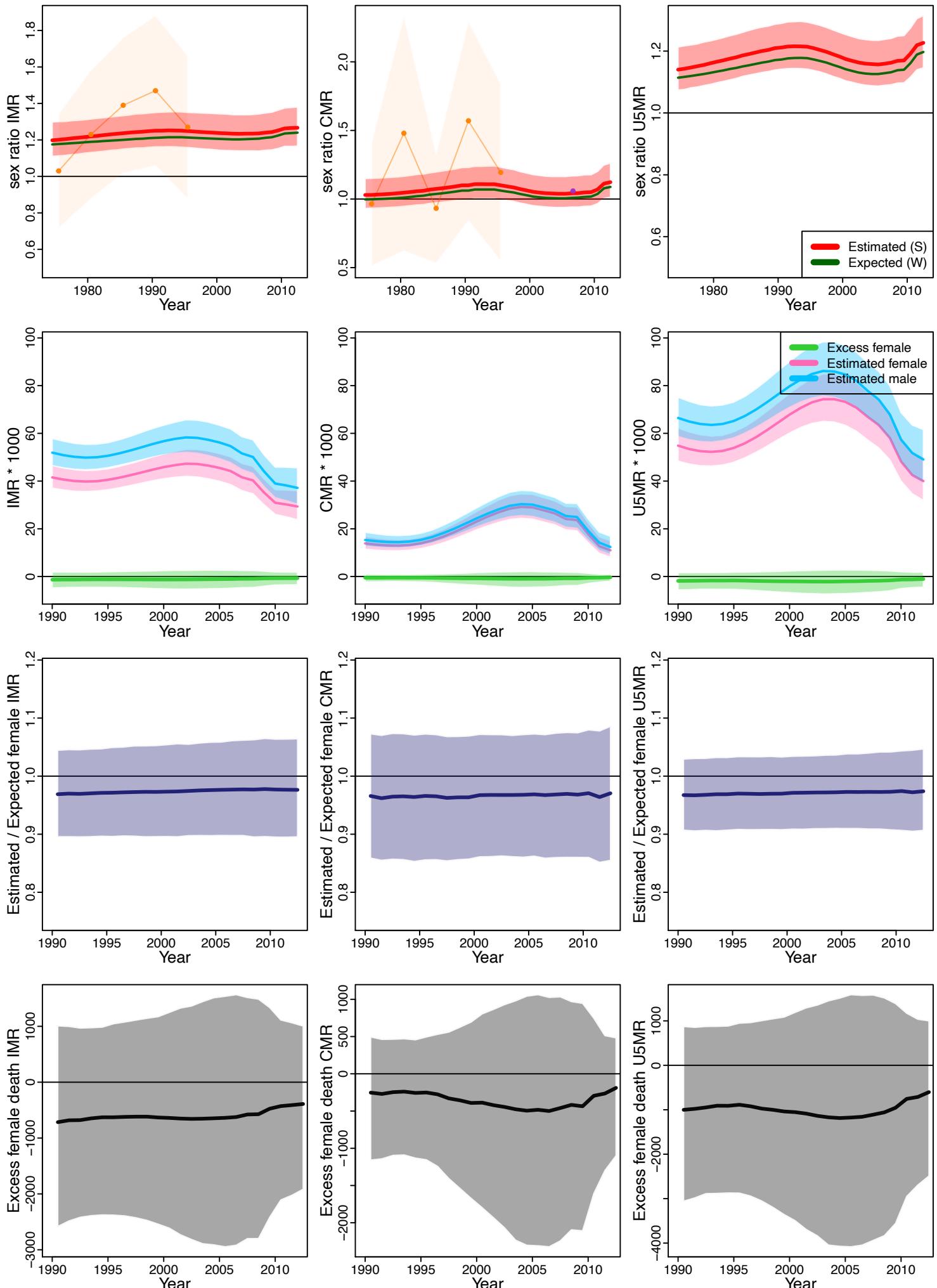
# Solomon Islands



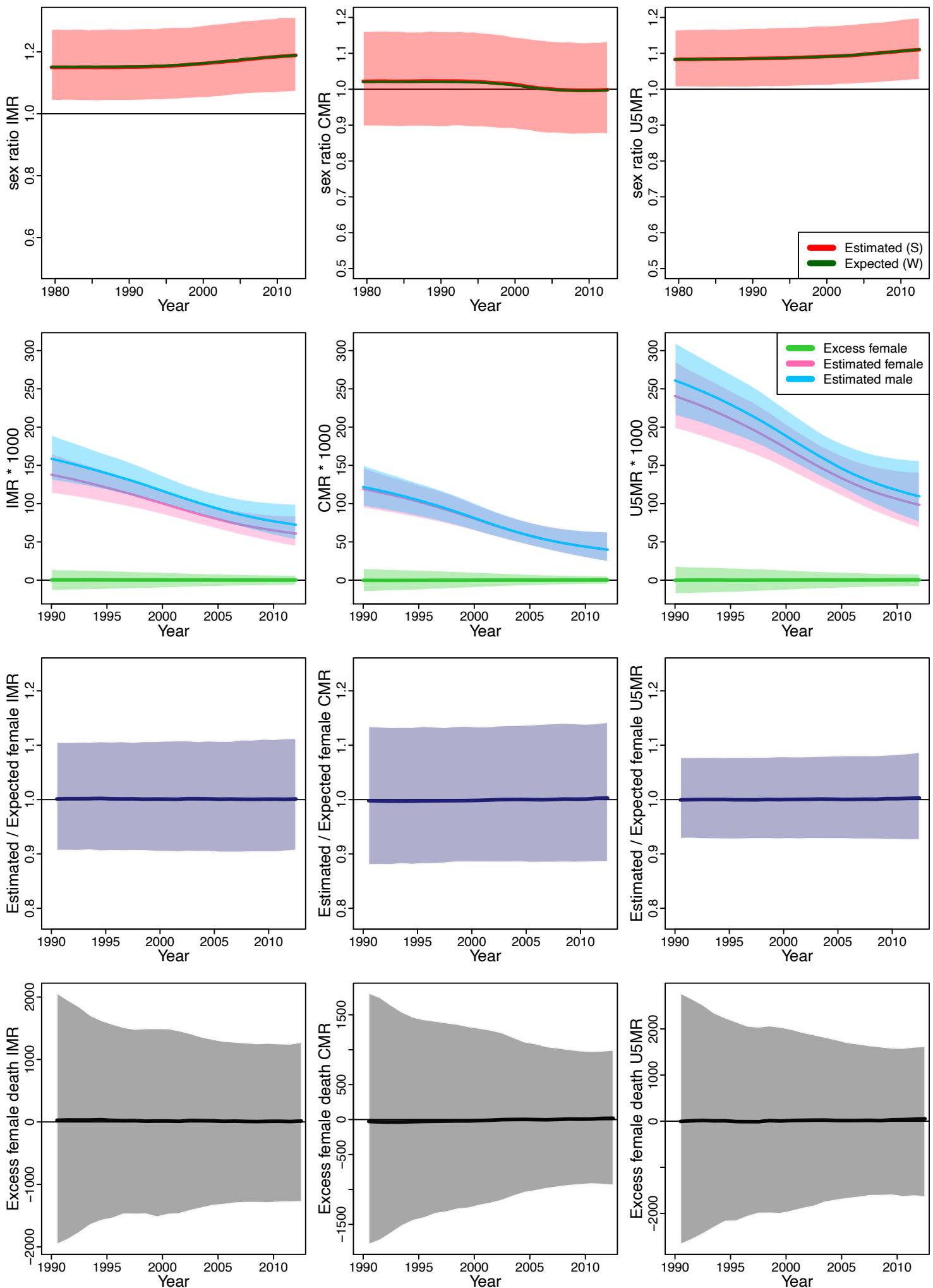
# Somalia



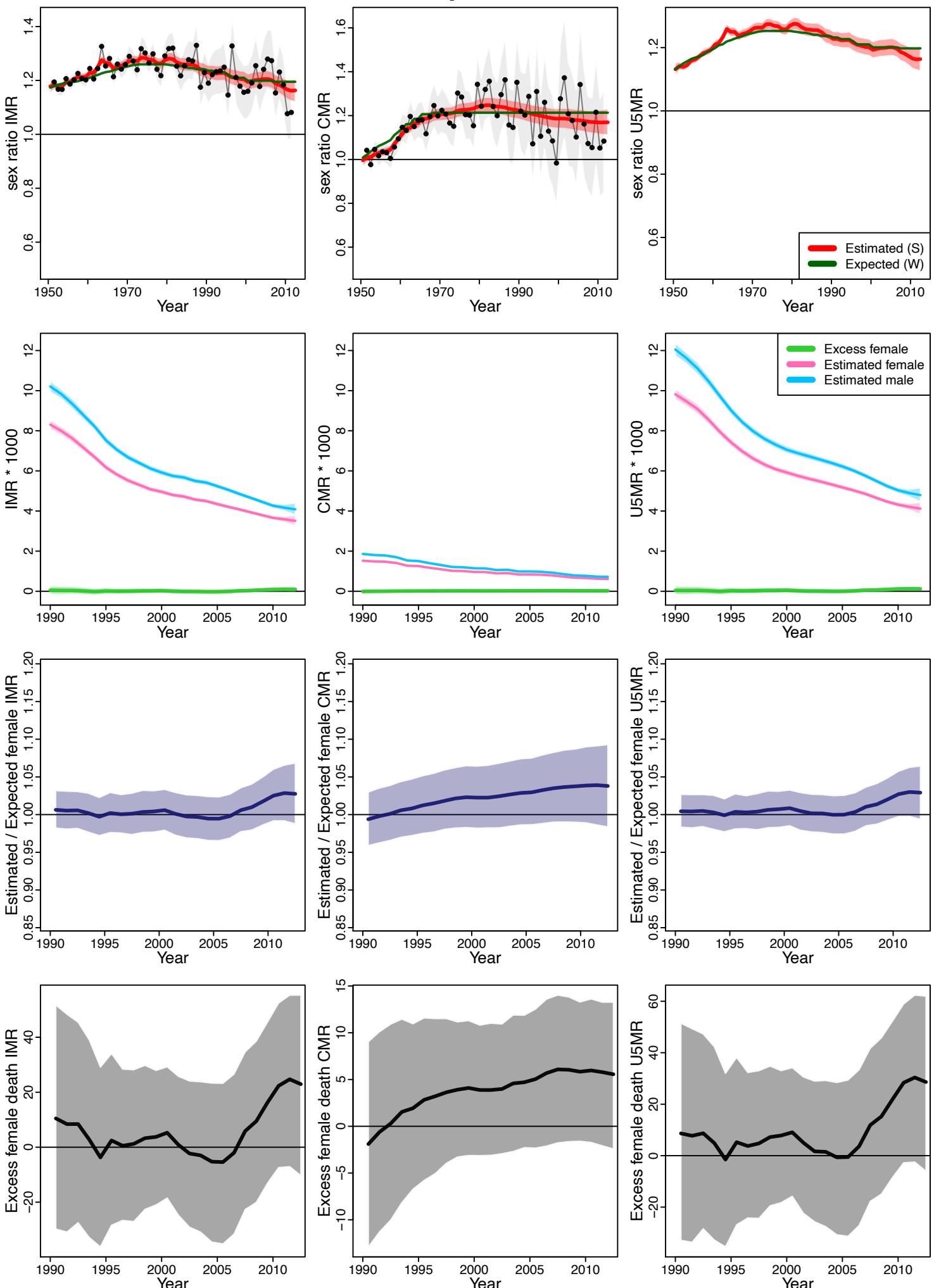
# South Africa



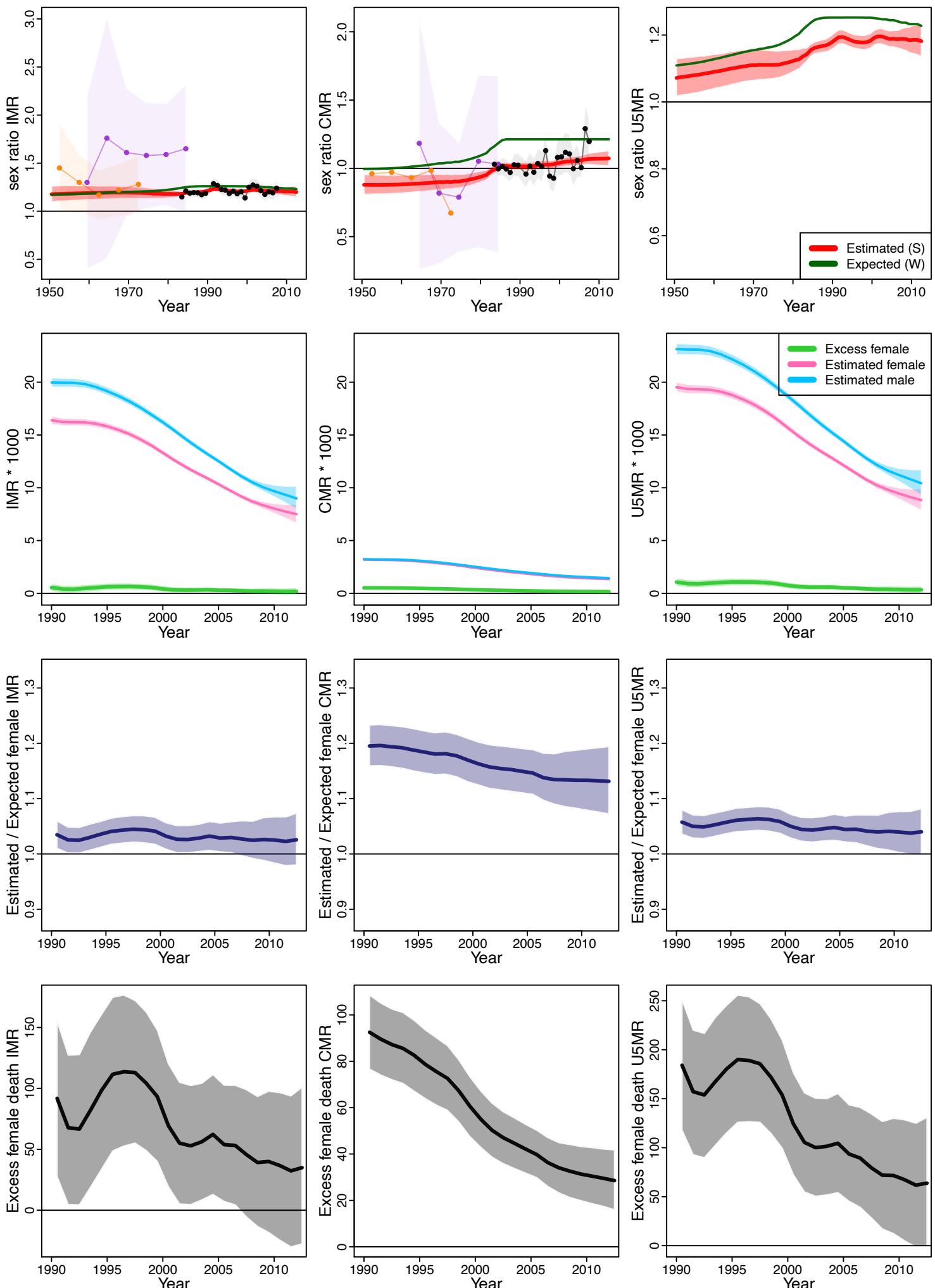
# South Sudan



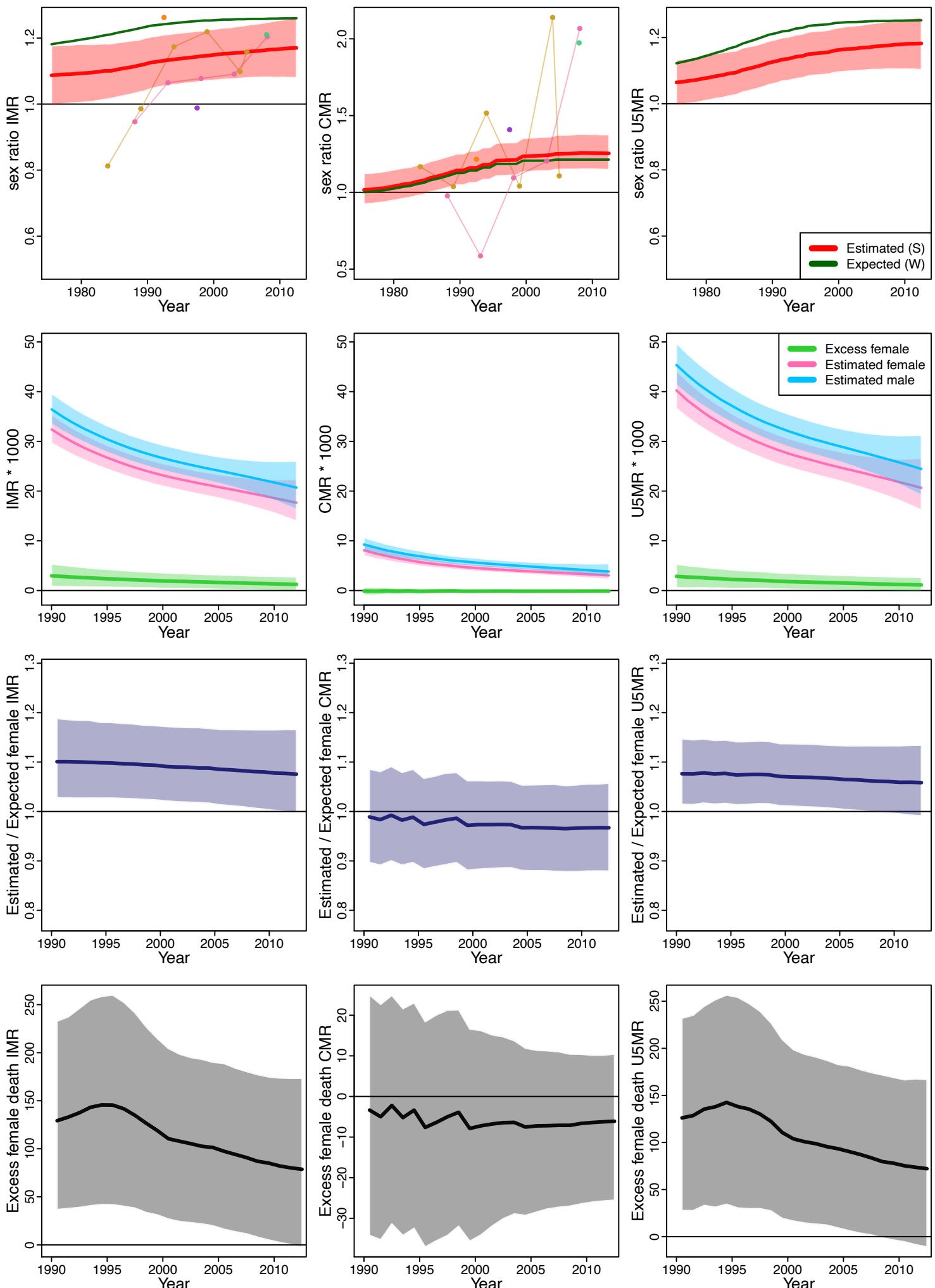
# Spain



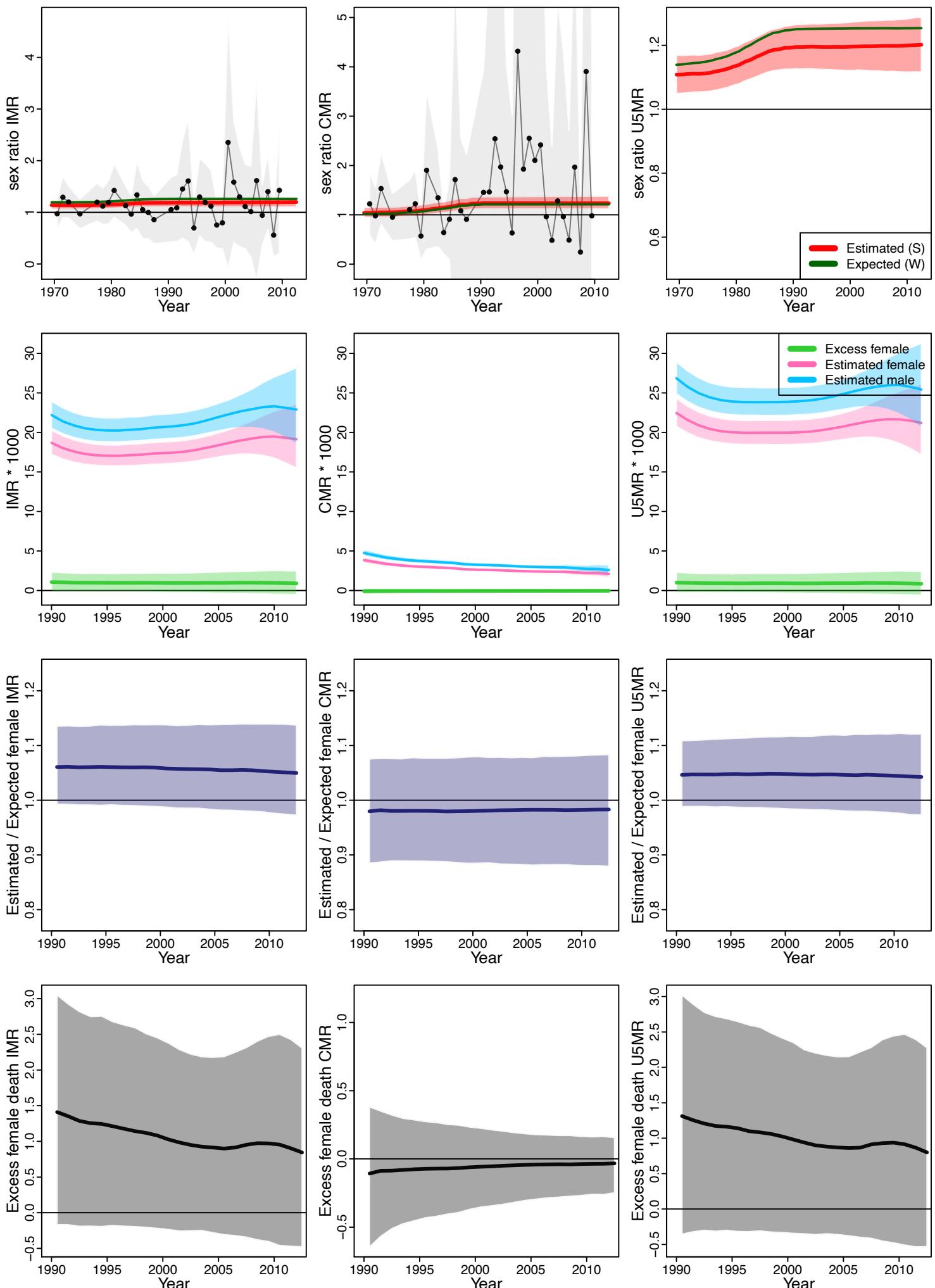
# Sri Lanka



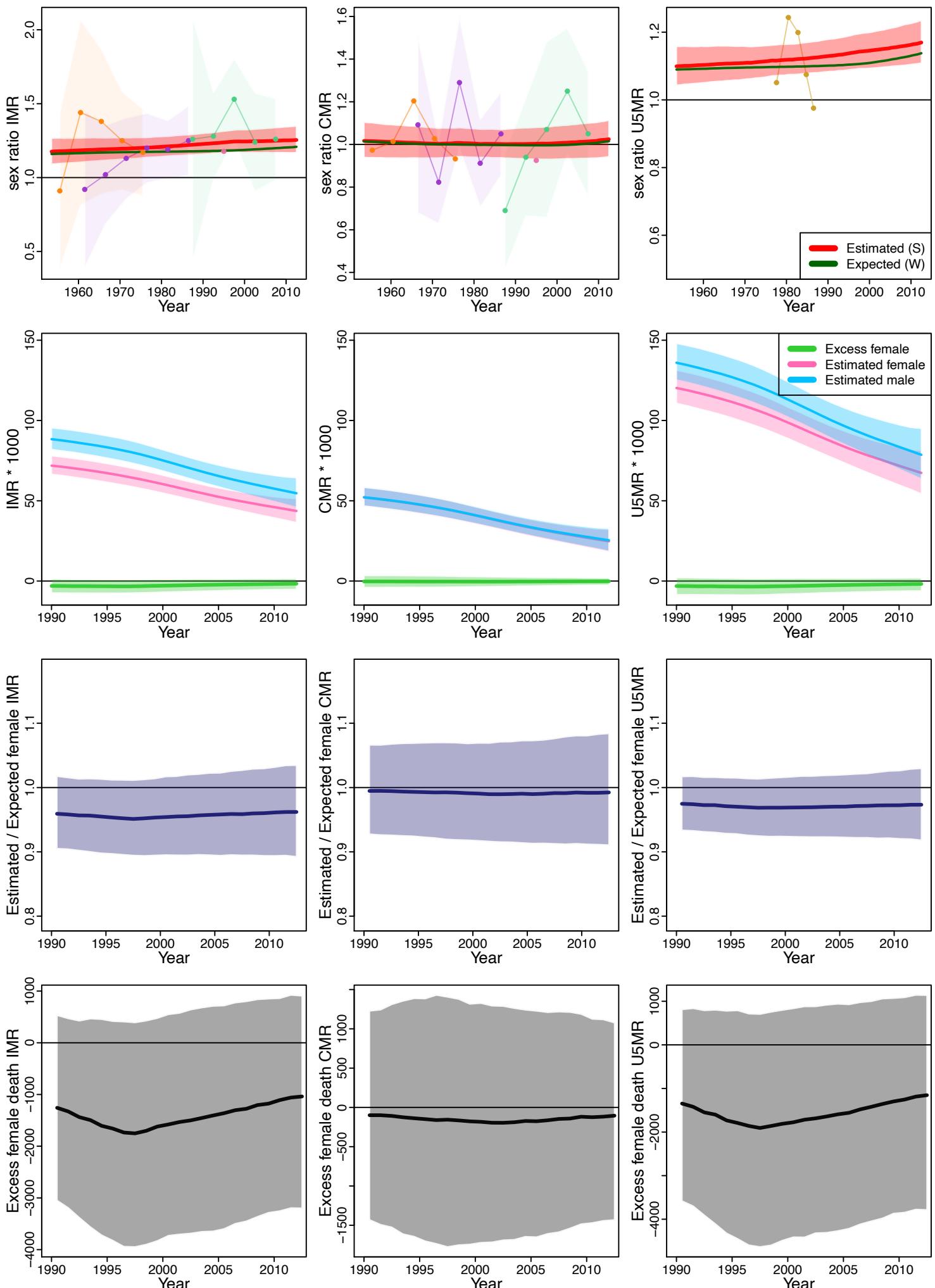
# State of Palestine



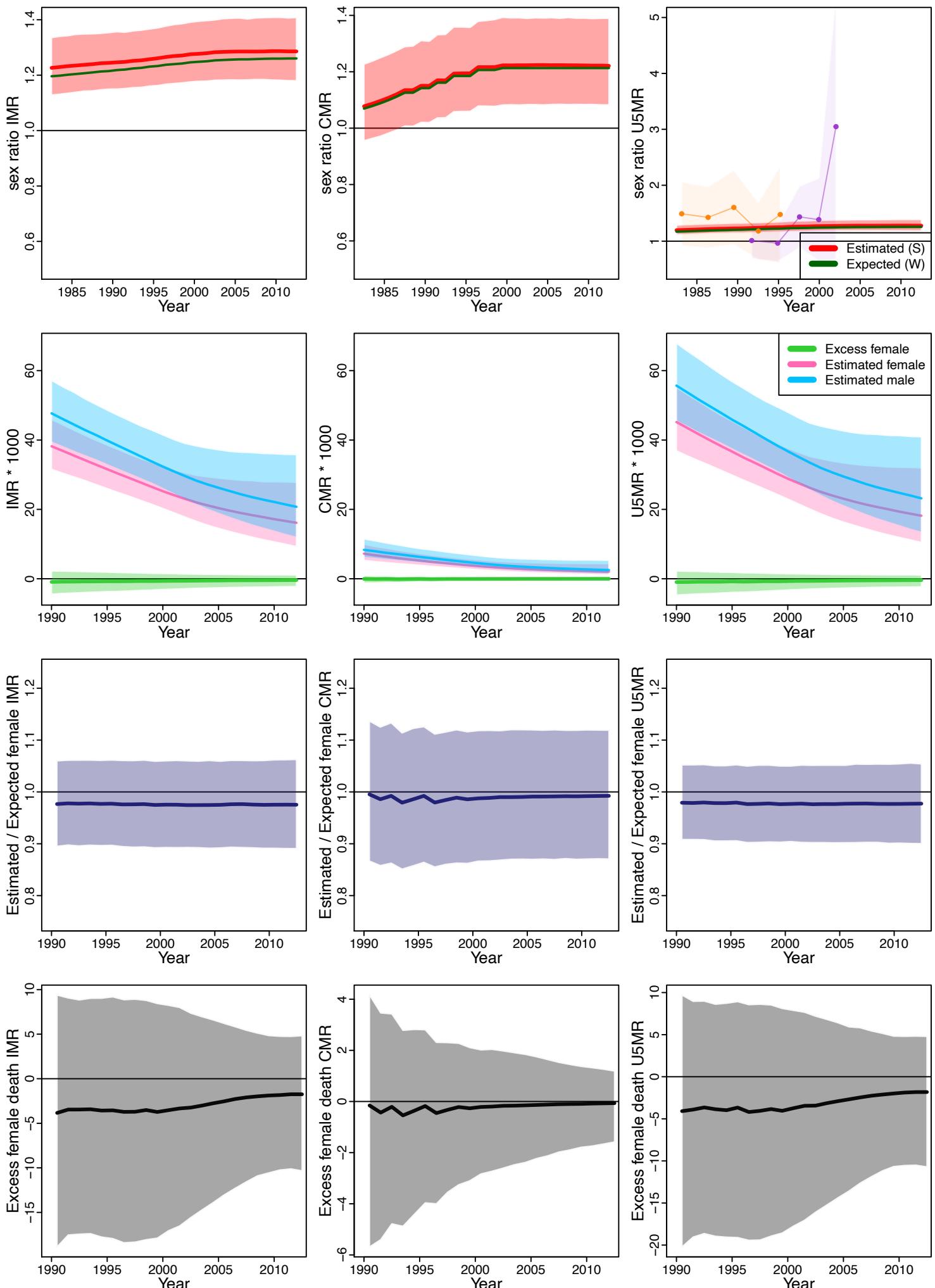
# Saint Vincent and the Grenadines



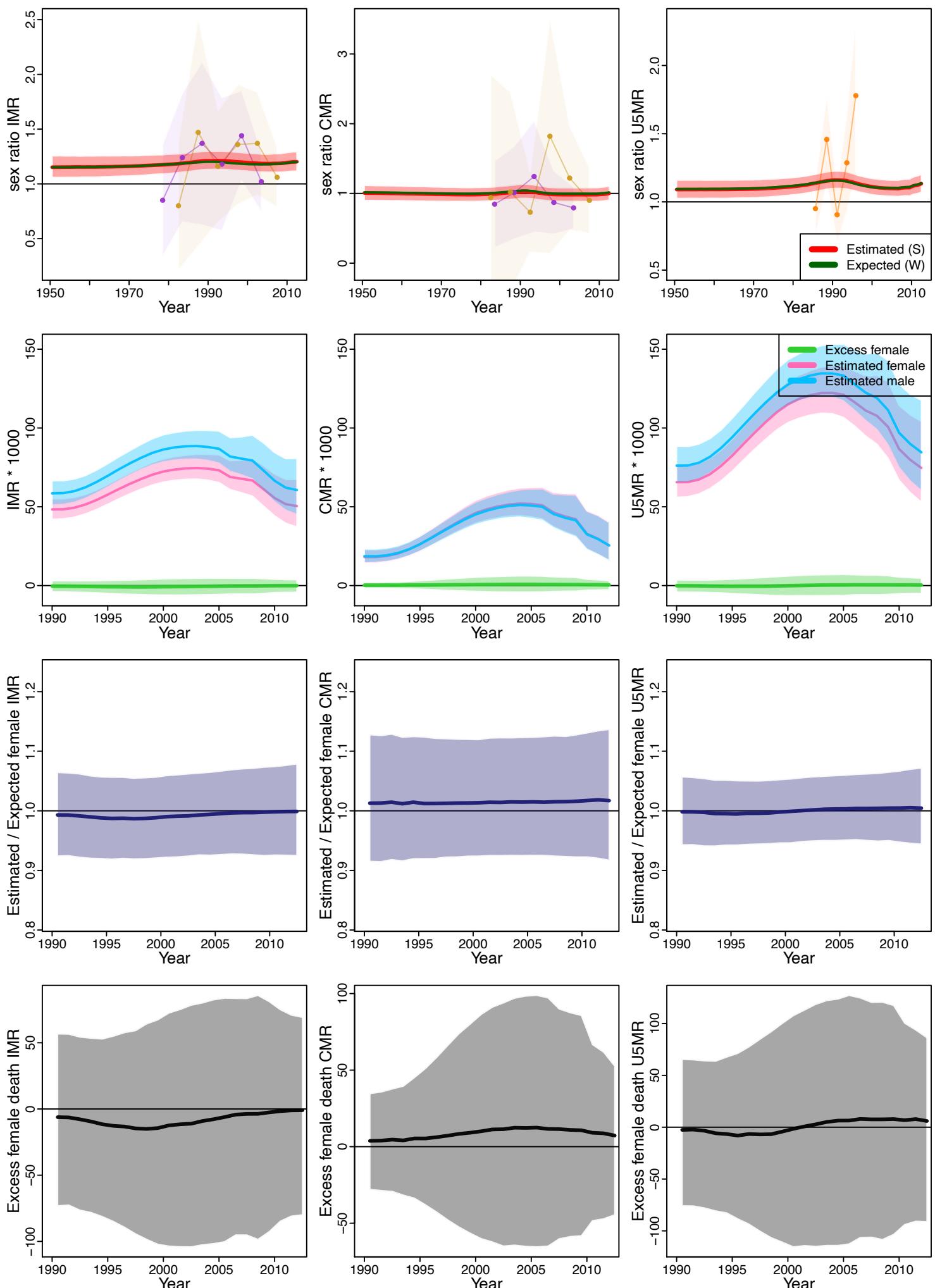
# Sudan



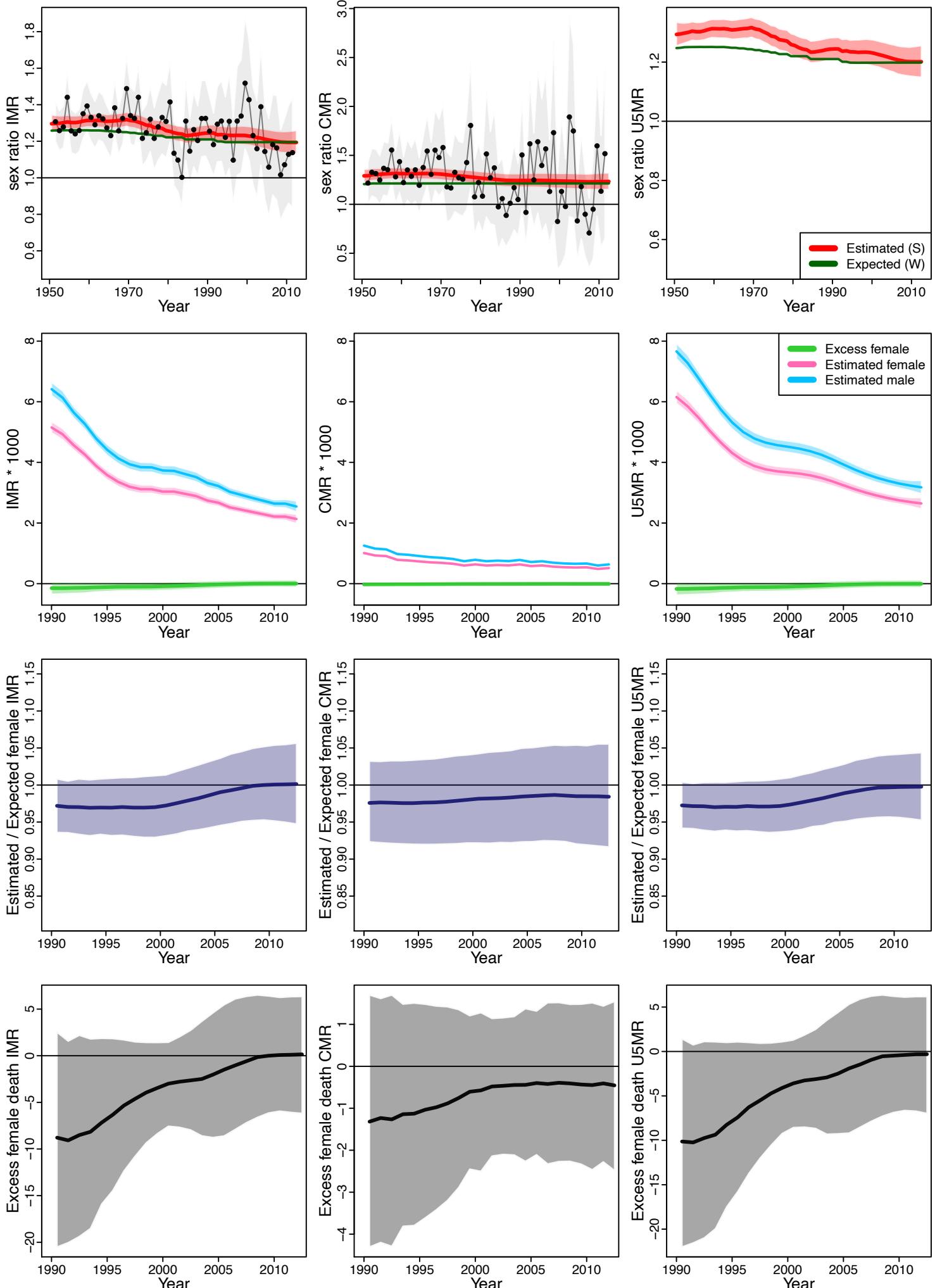
# Suriname



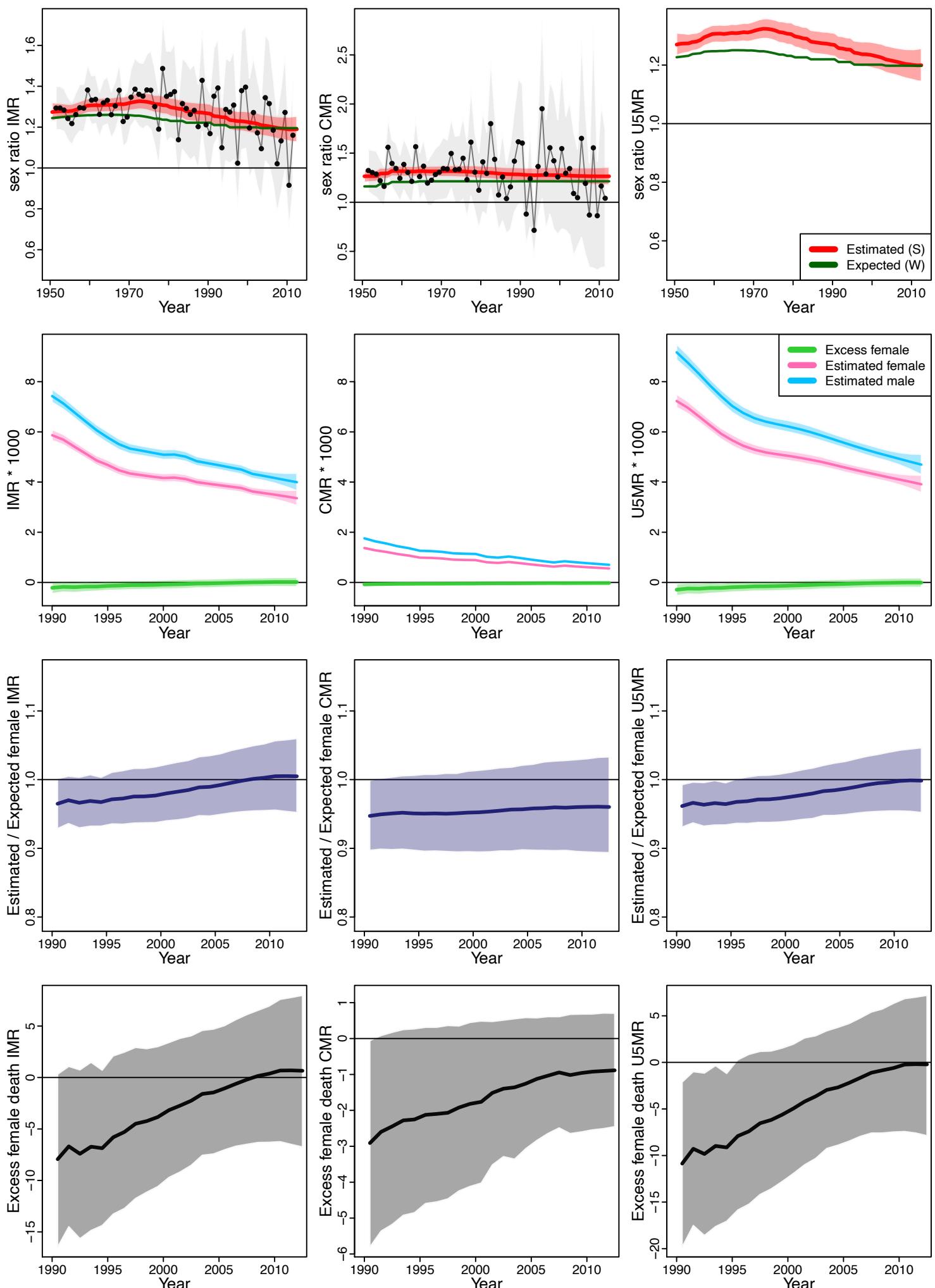
# Swaziland



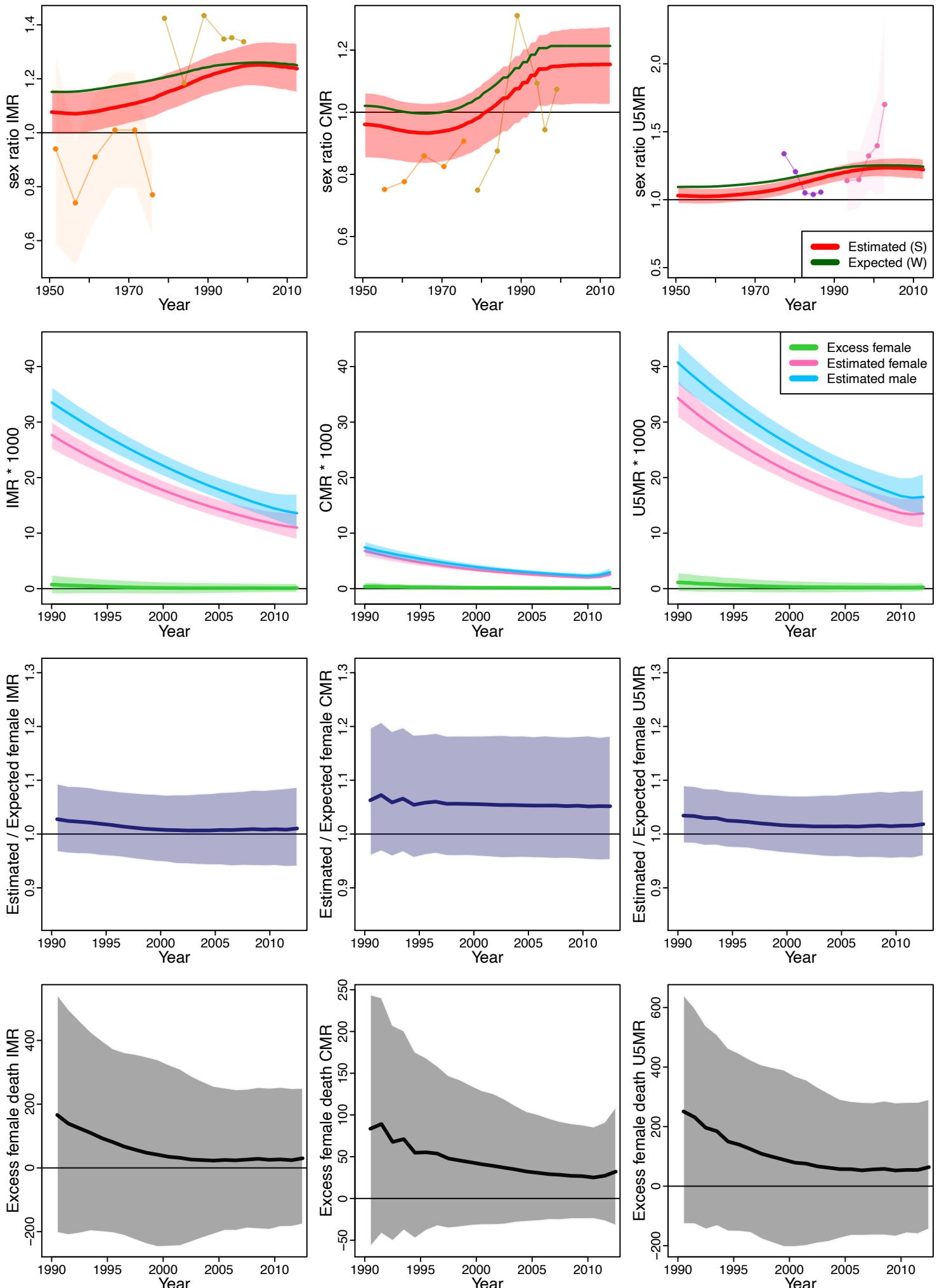
# Sweden



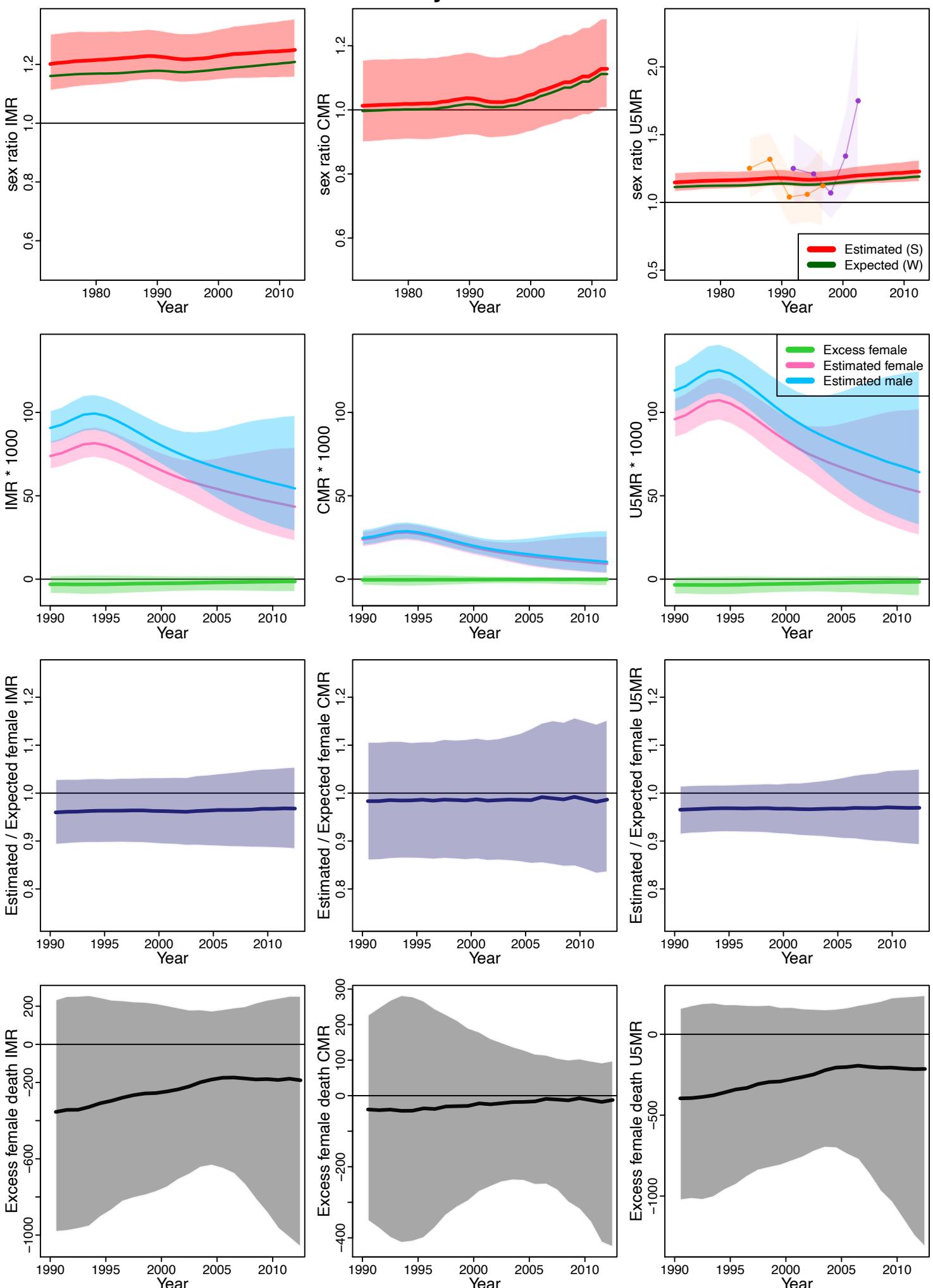
# Switzerland



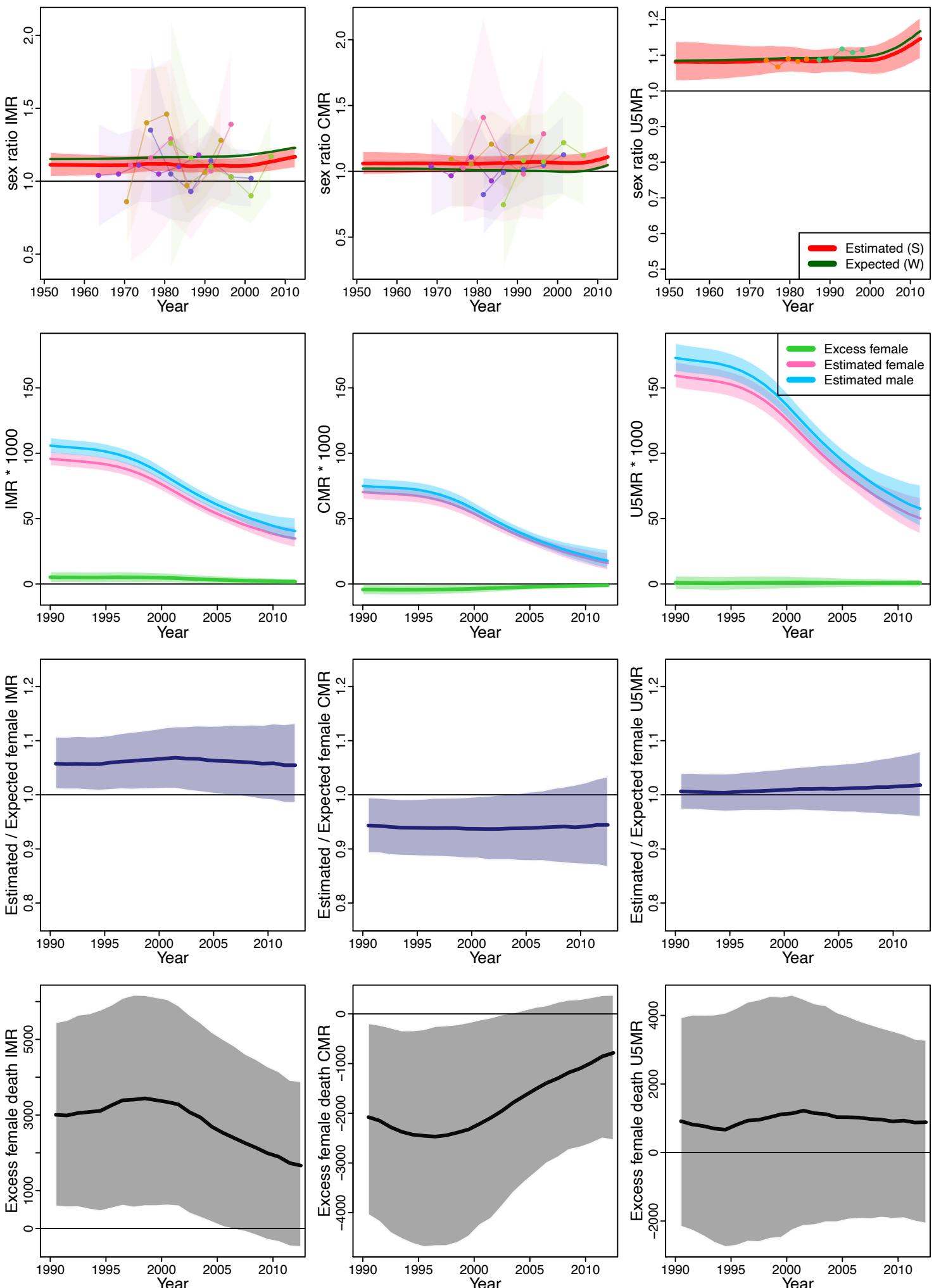
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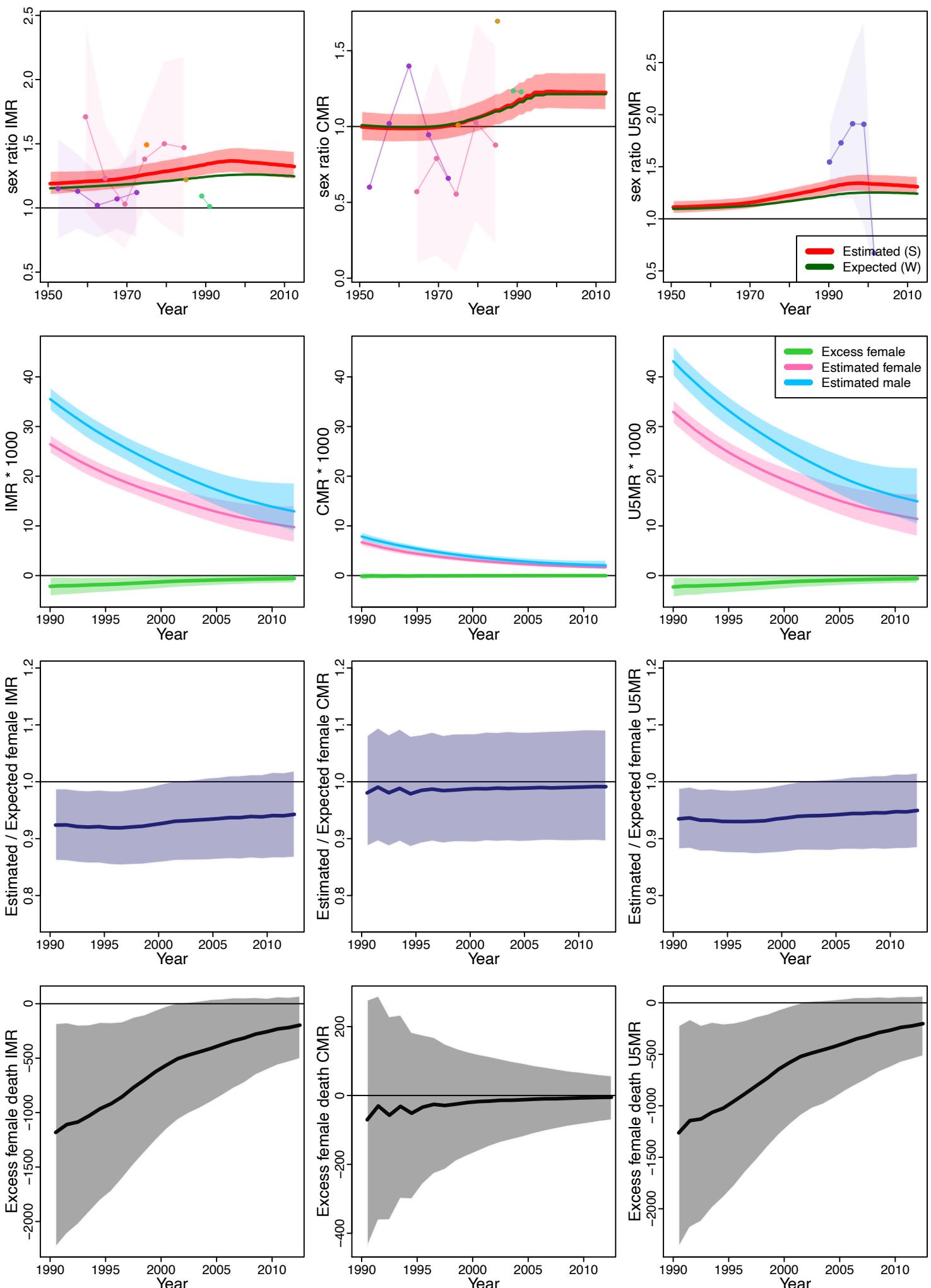
# Tajikistan



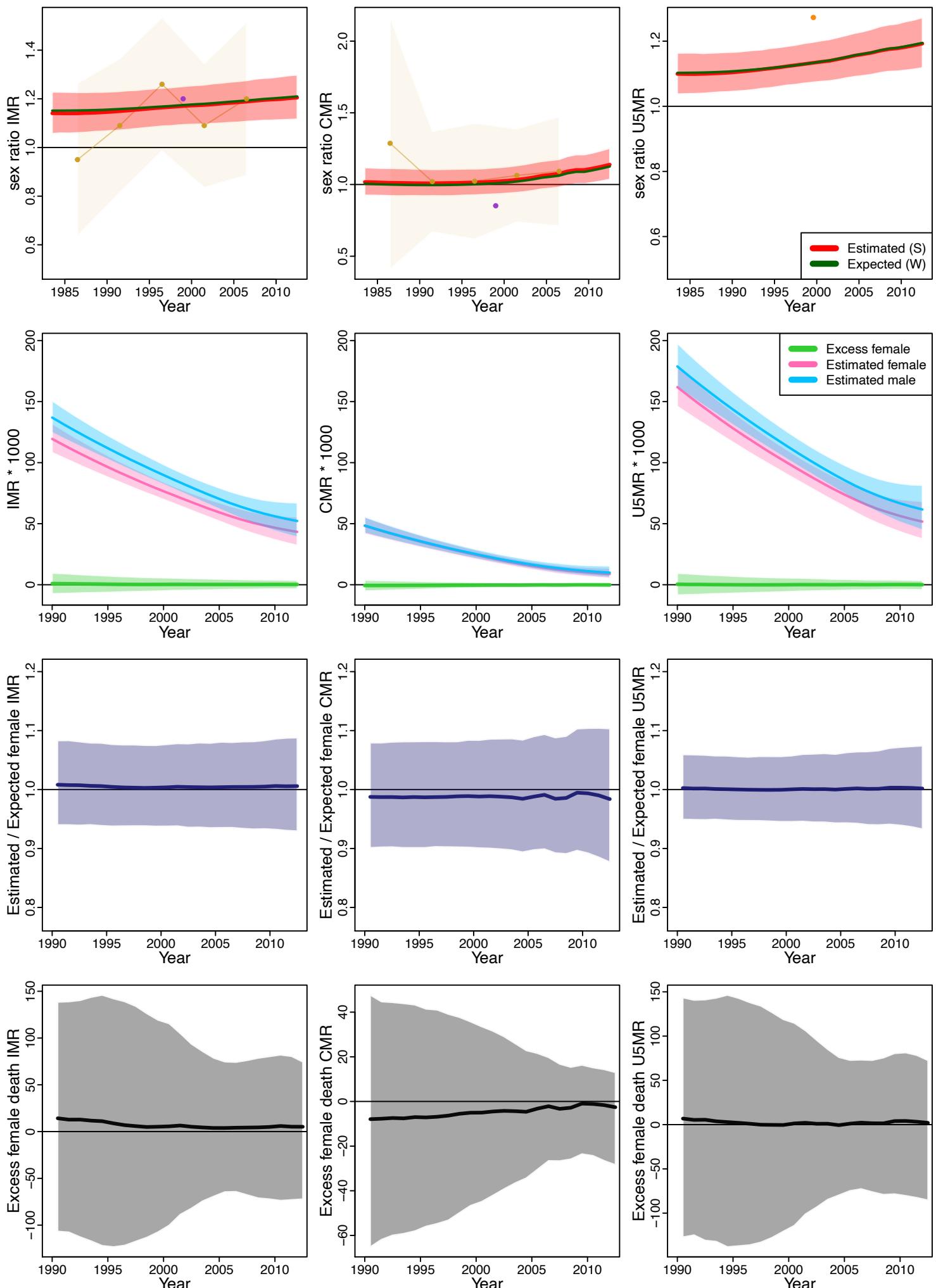
# Tanzania



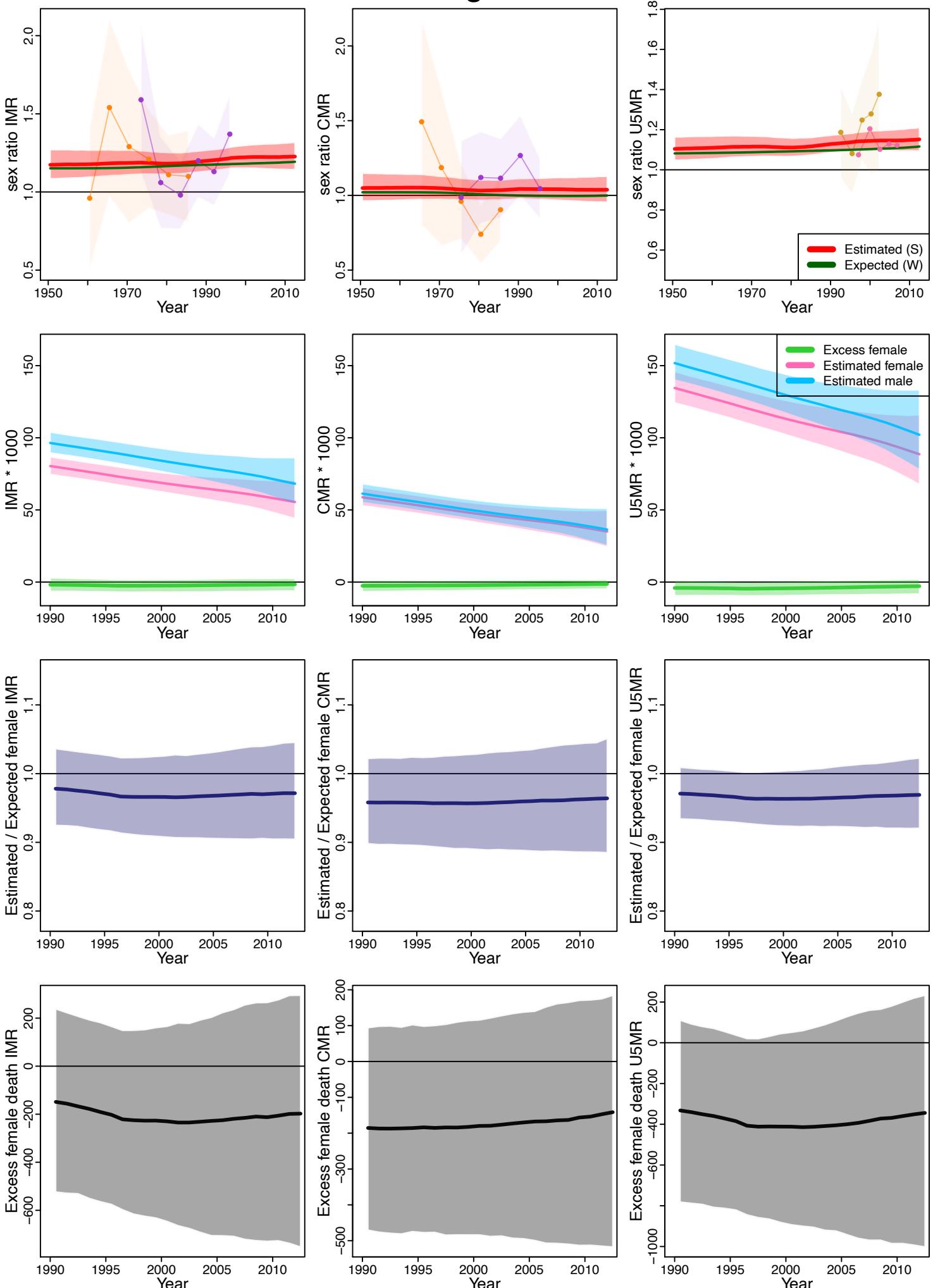
# Thailand



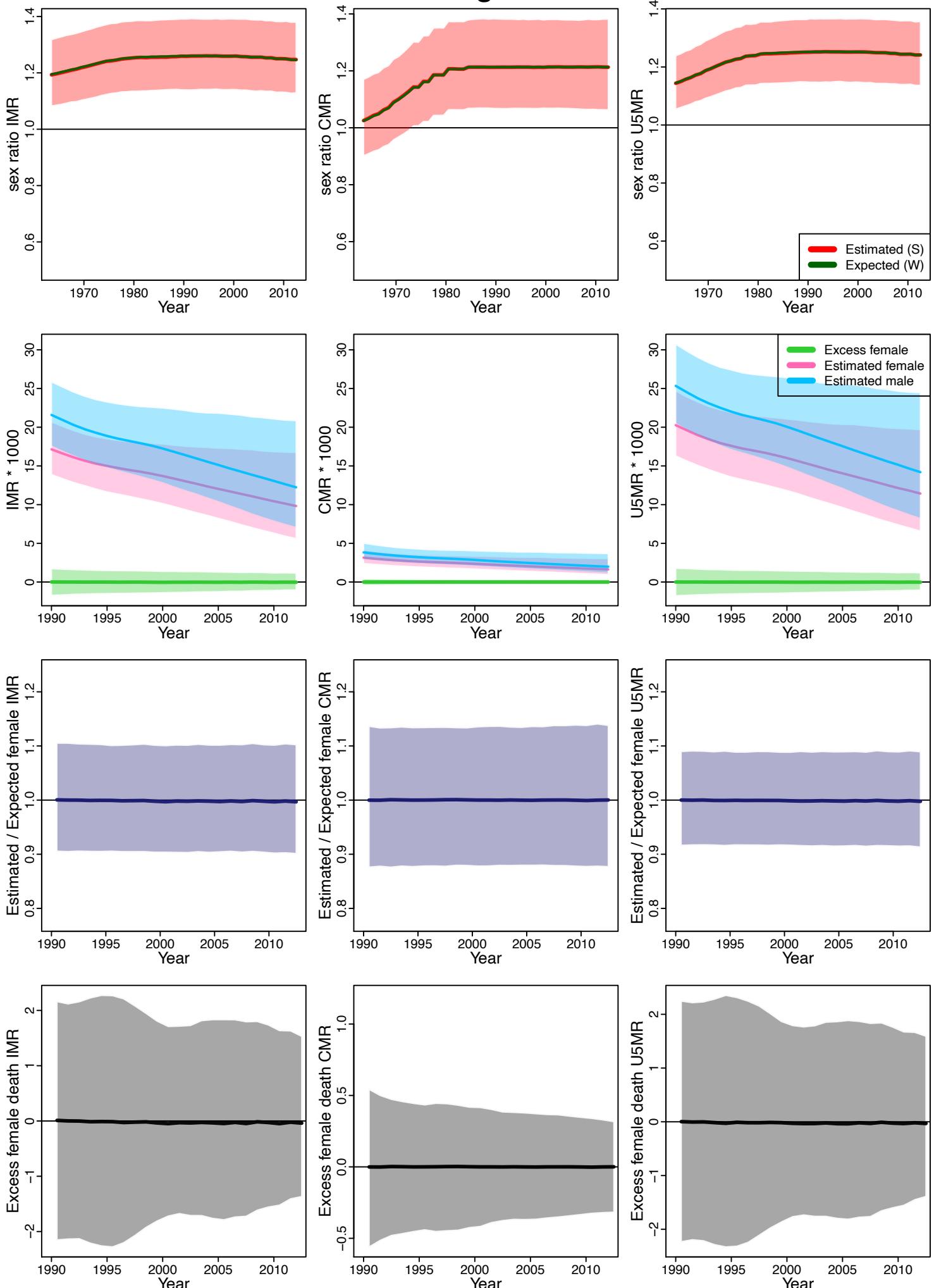
# Timor Leste



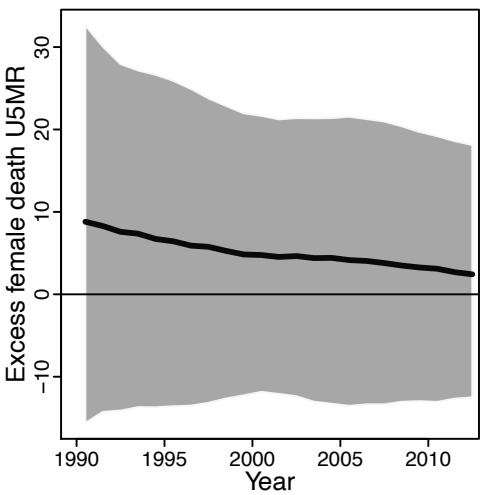
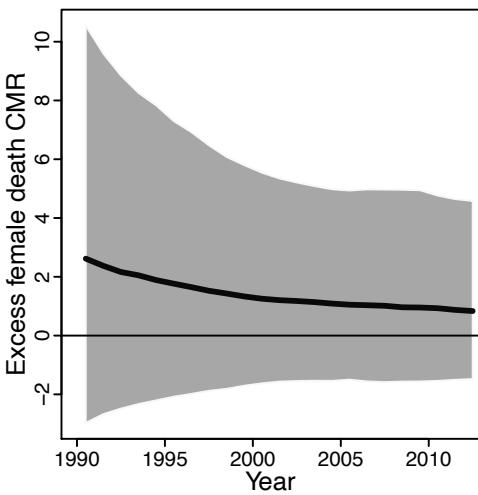
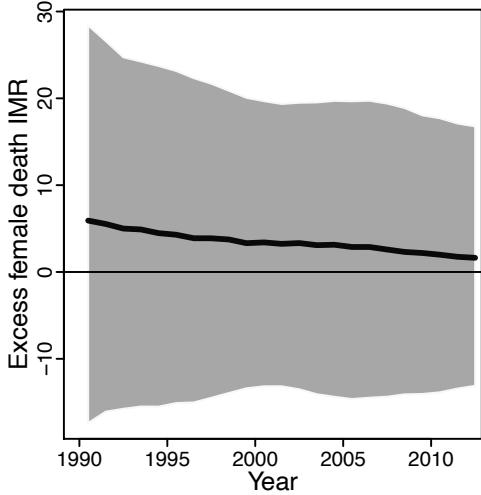
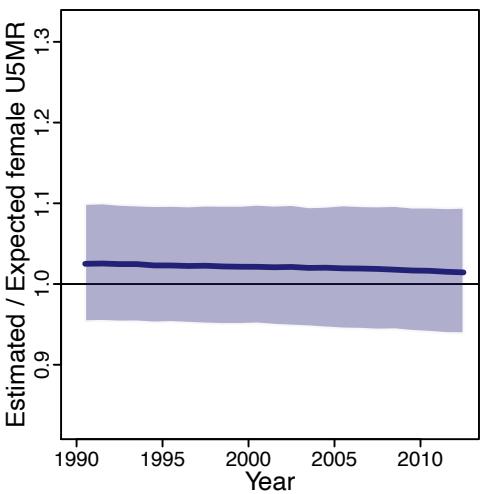
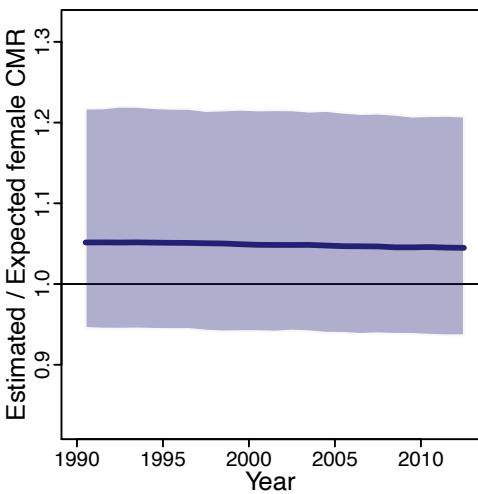
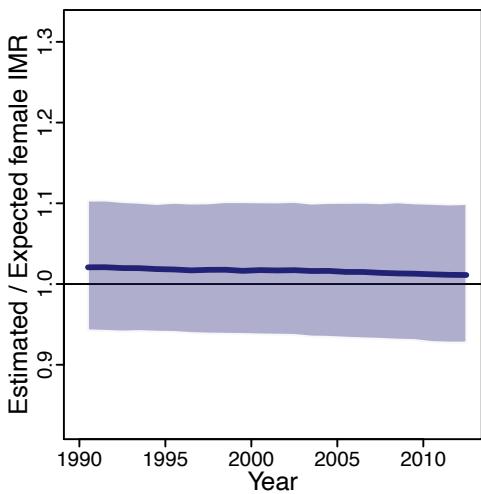
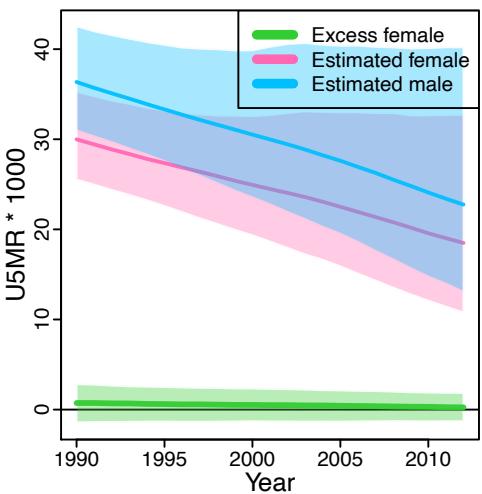
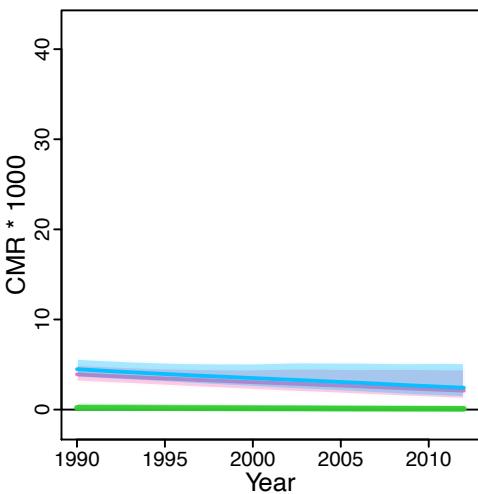
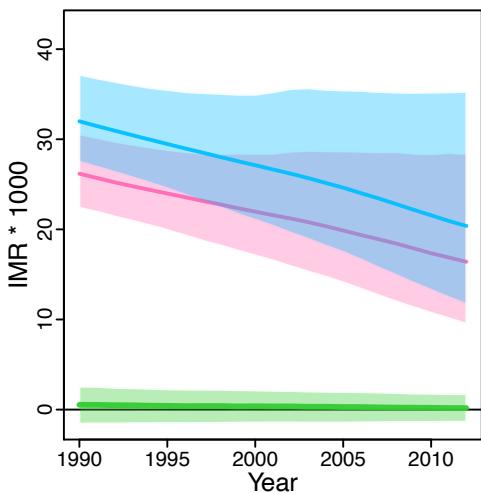
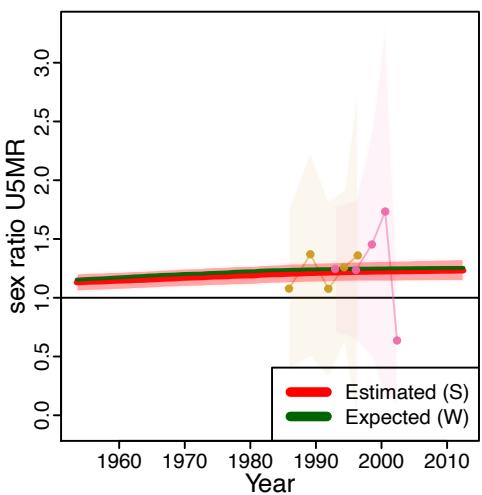
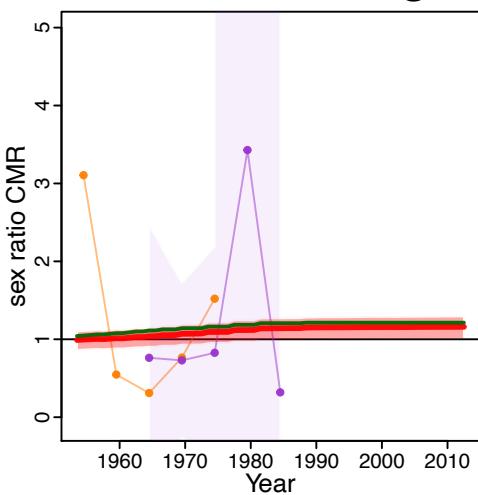
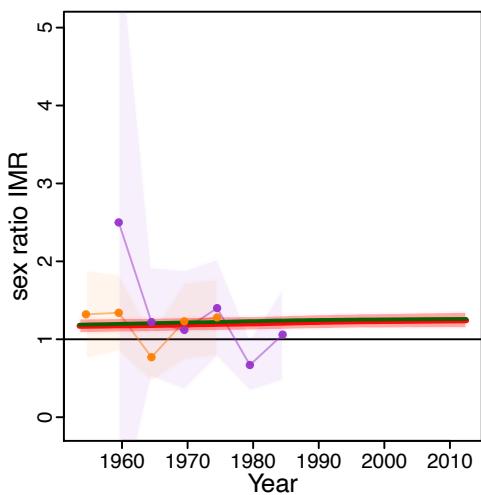
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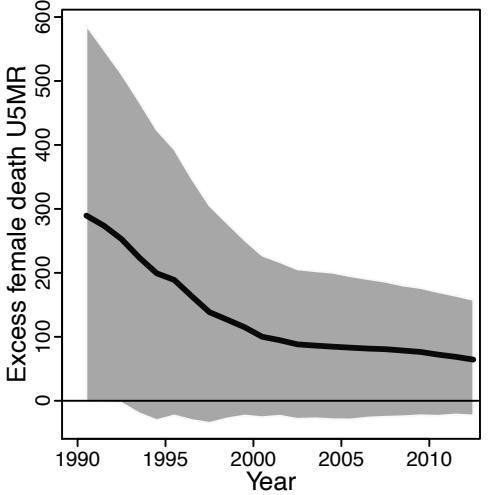
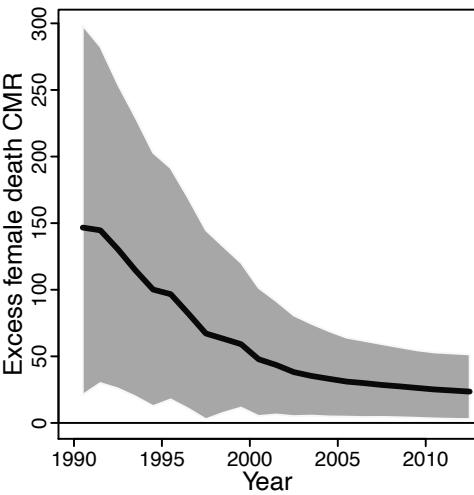
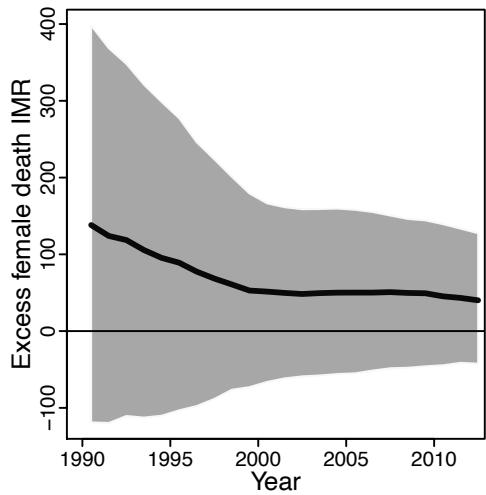
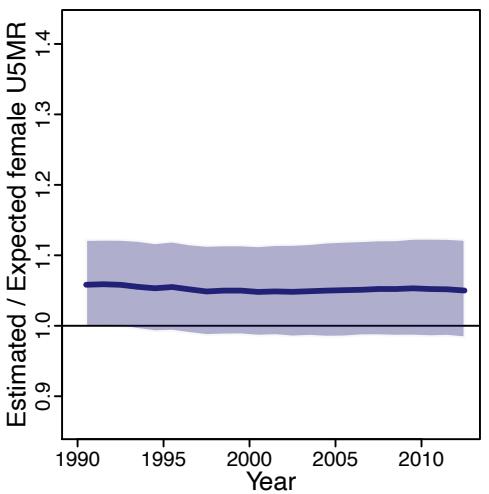
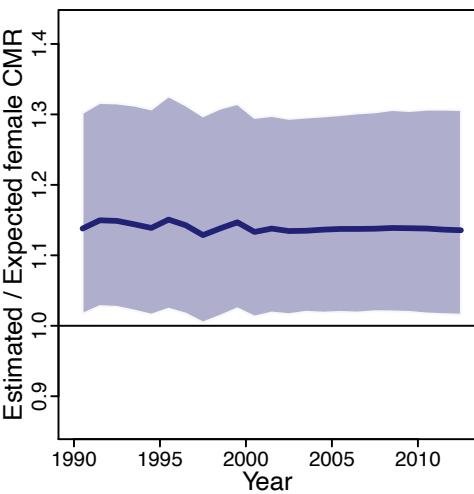
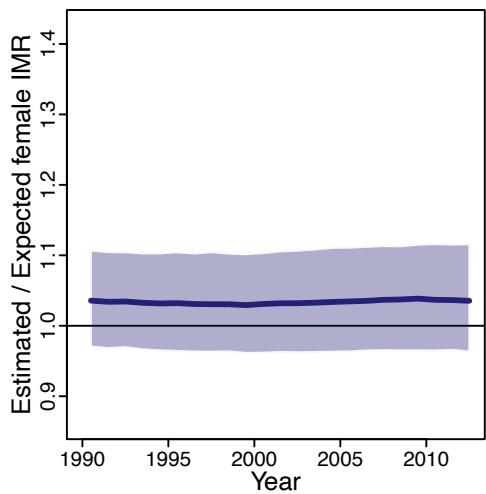
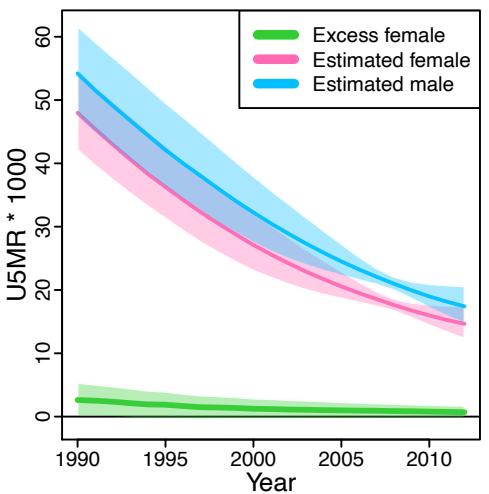
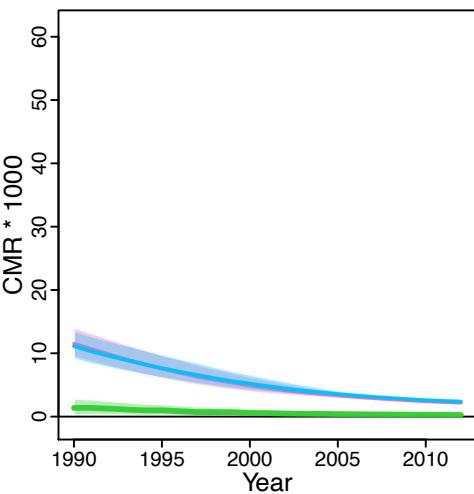
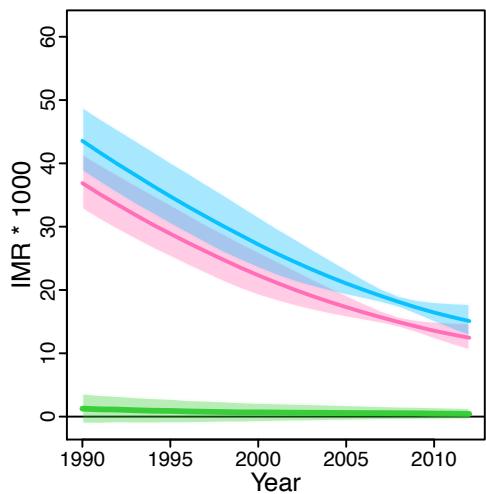
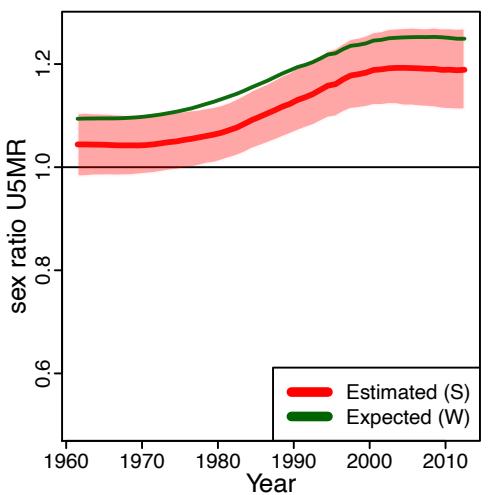
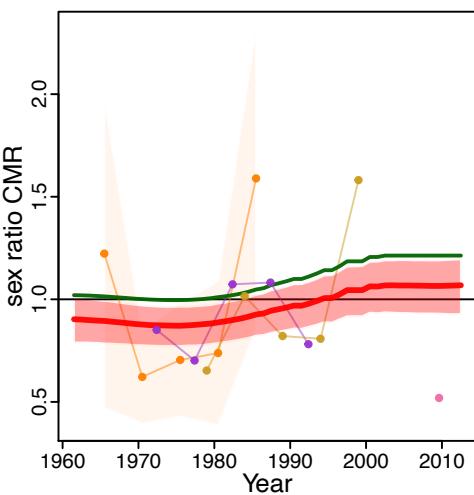
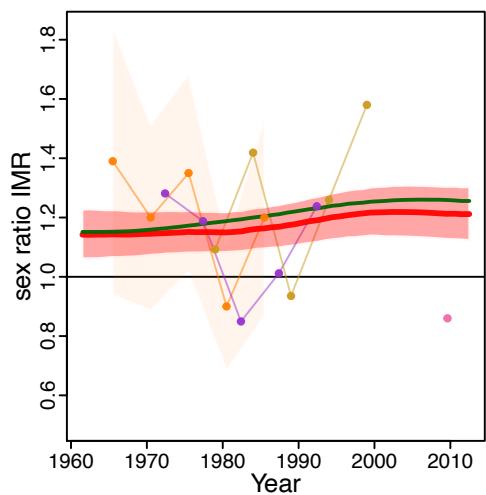
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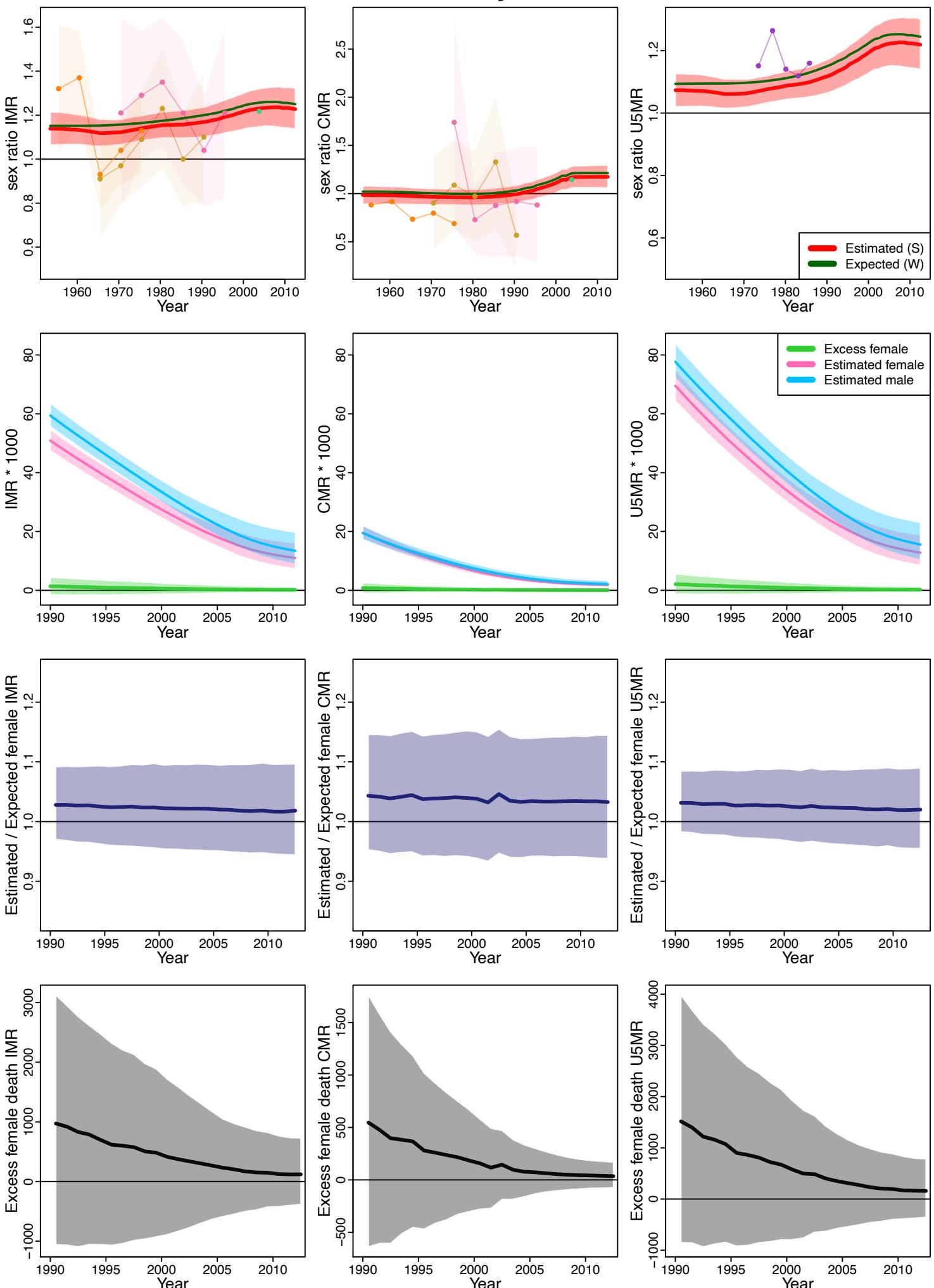
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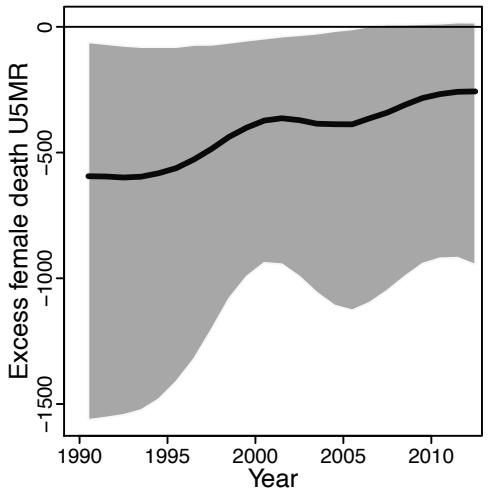
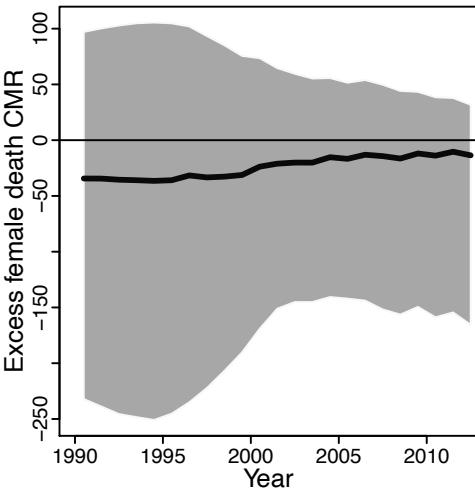
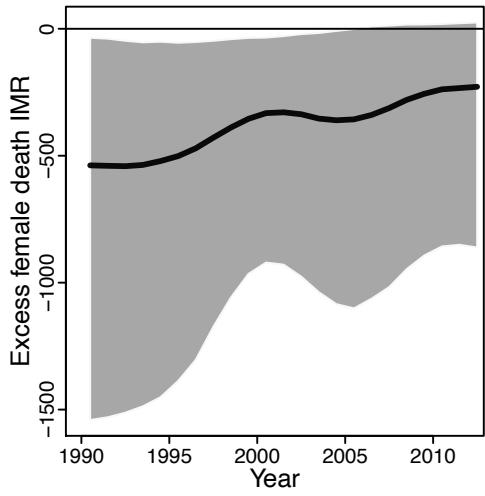
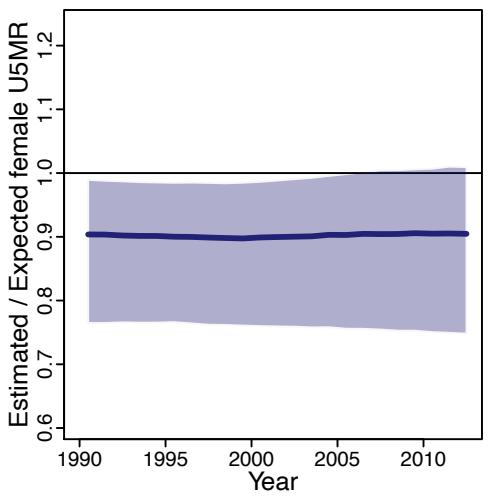
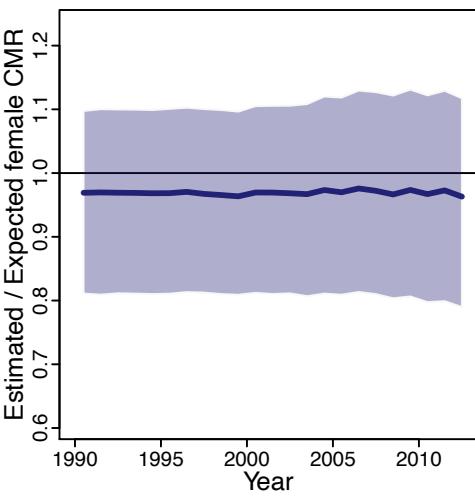
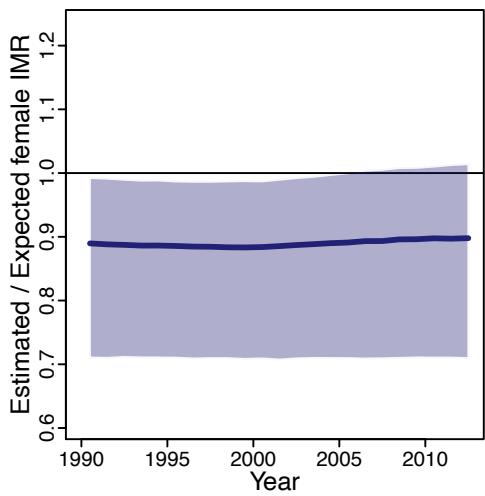
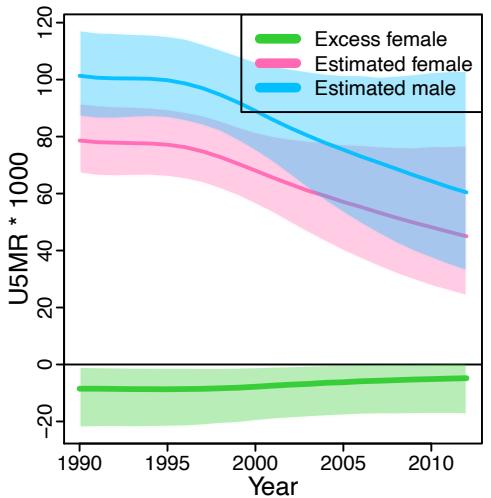
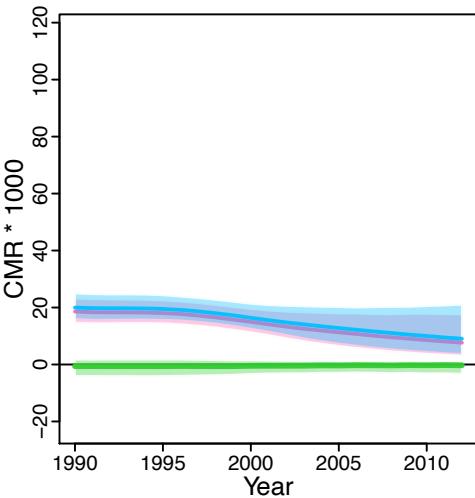
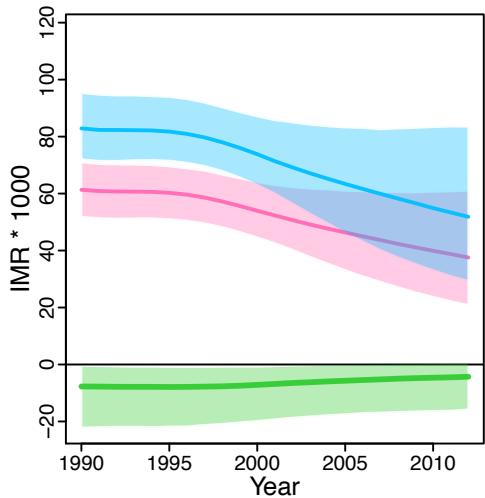
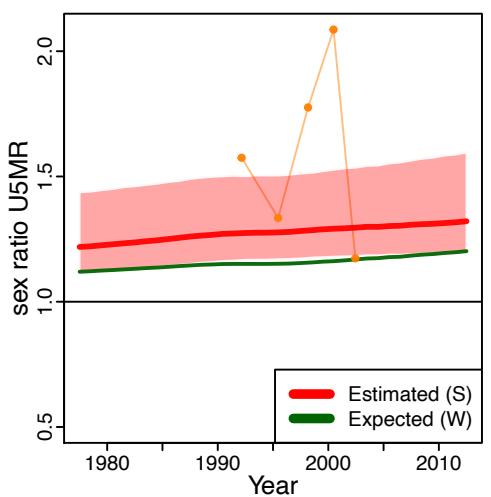
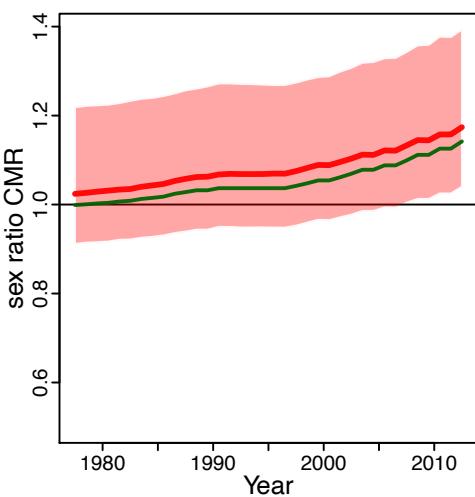
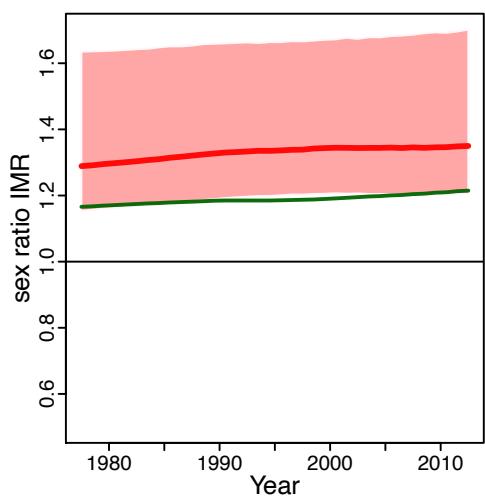
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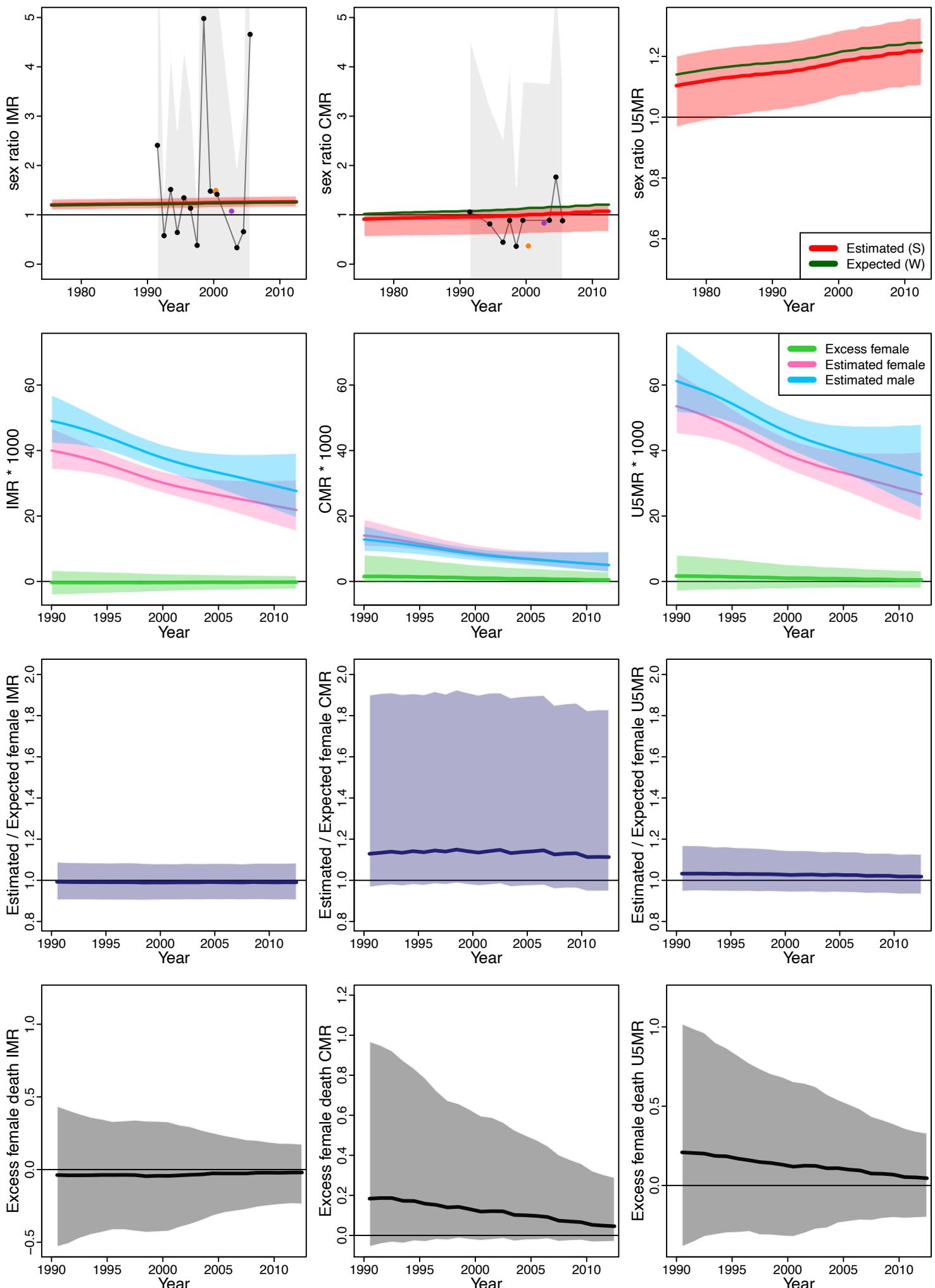
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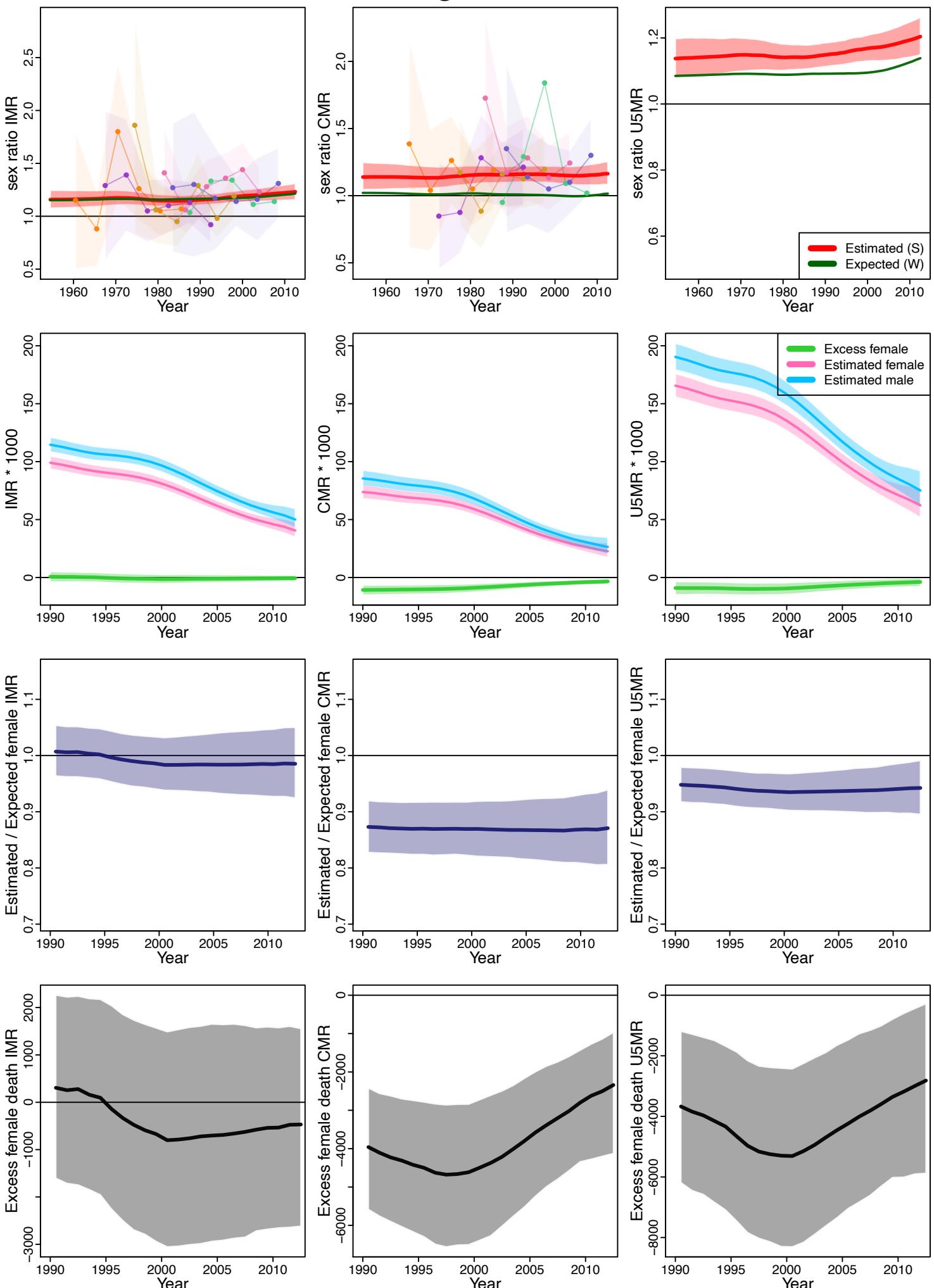
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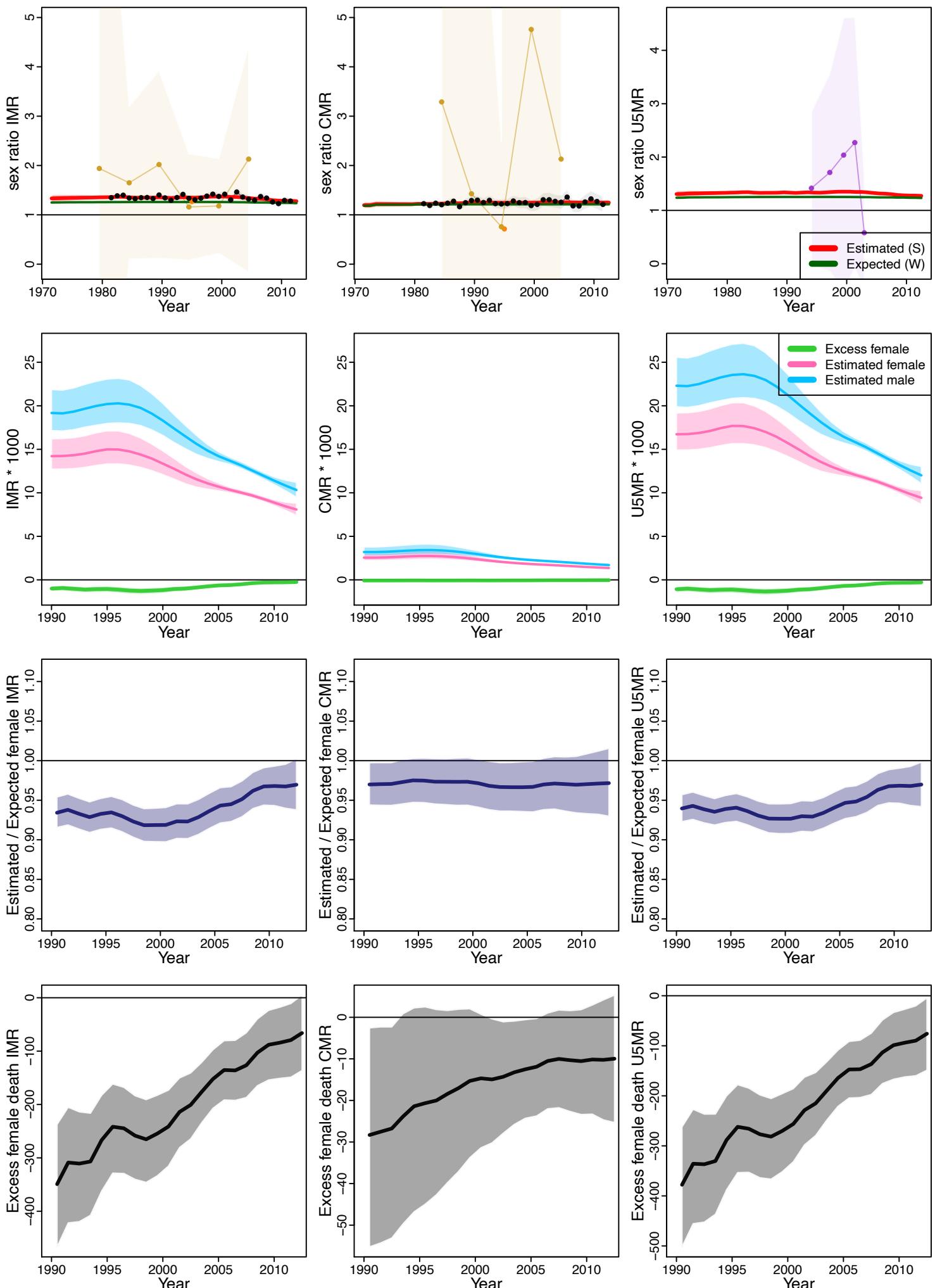
# Tuvalu



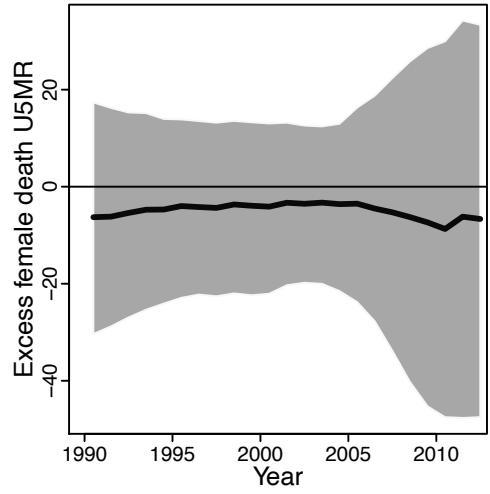
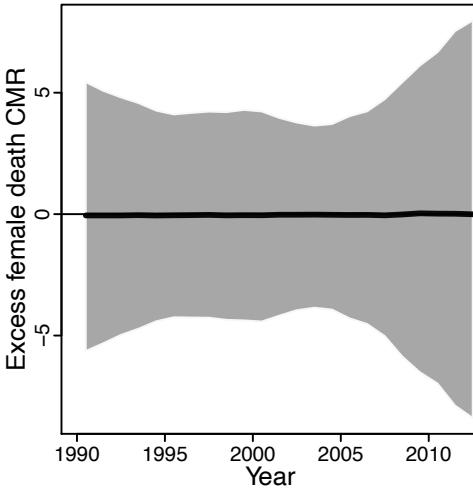
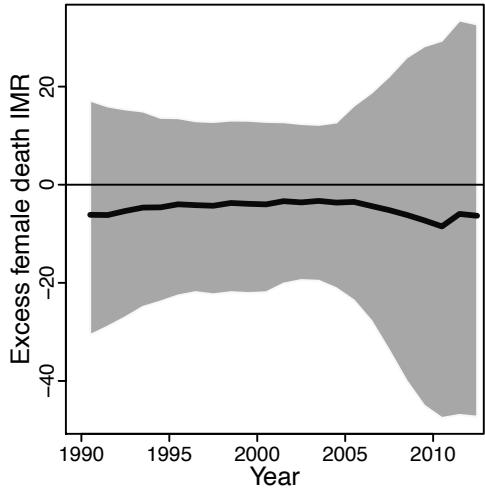
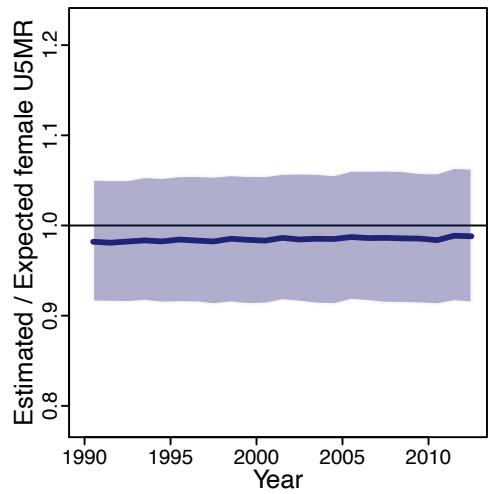
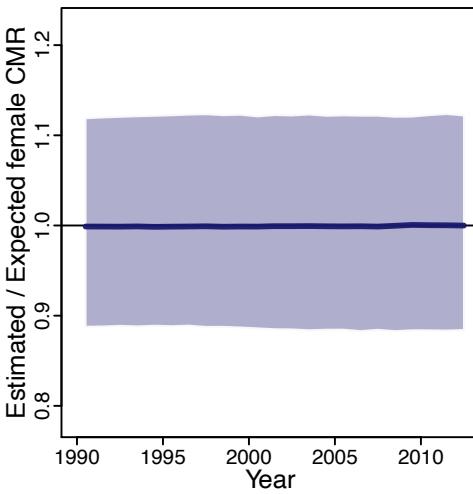
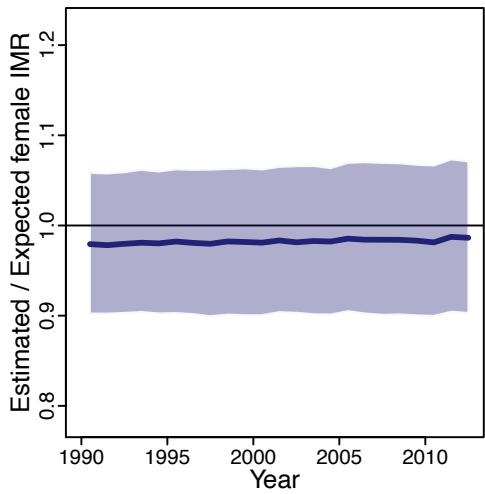
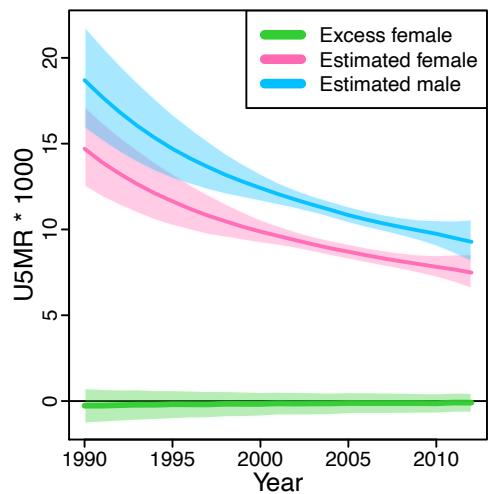
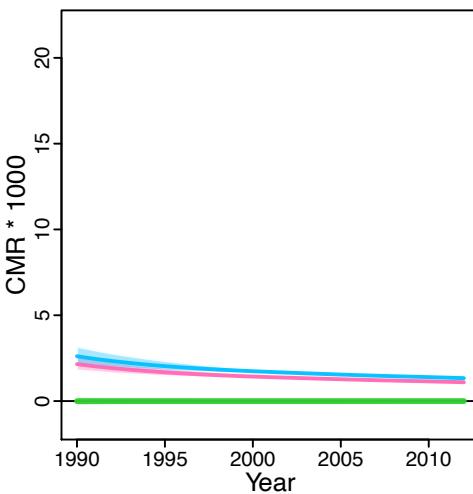
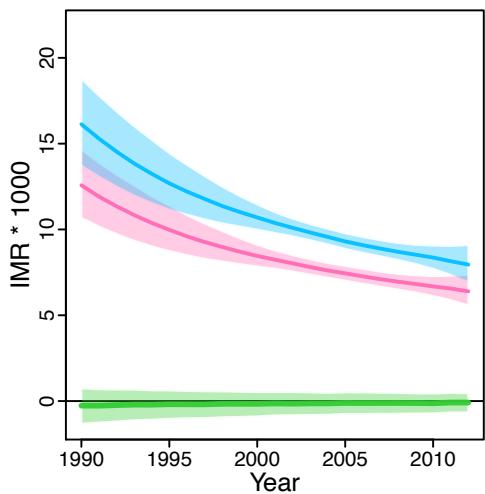
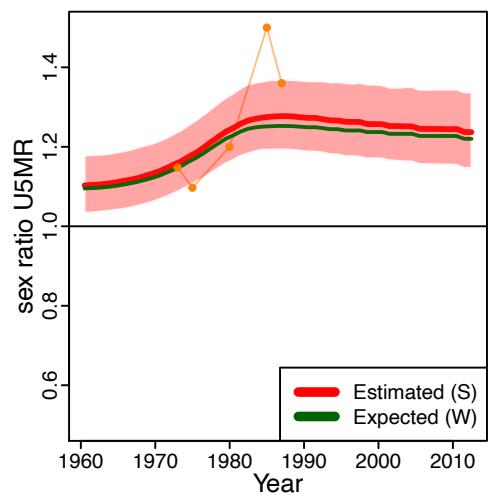
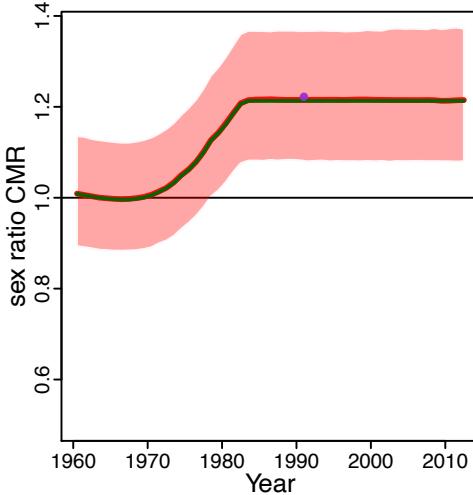
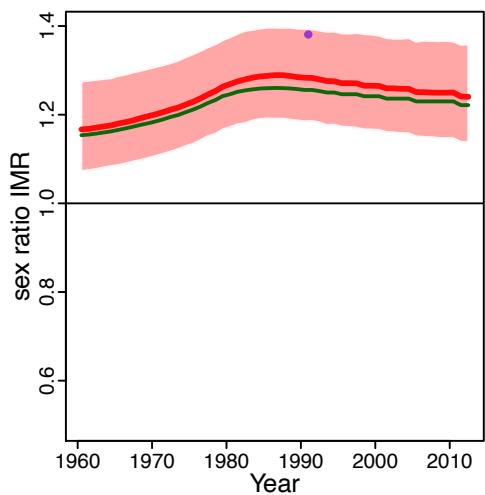
# Uganda



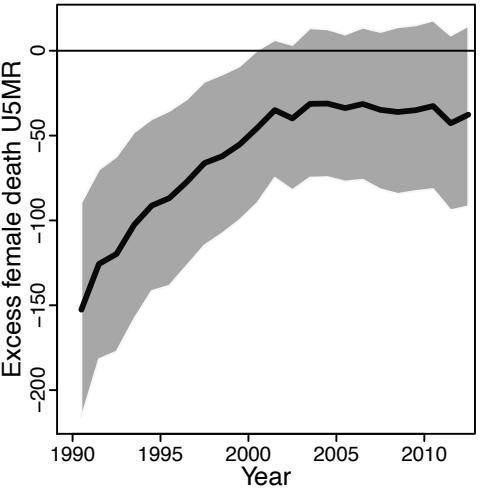
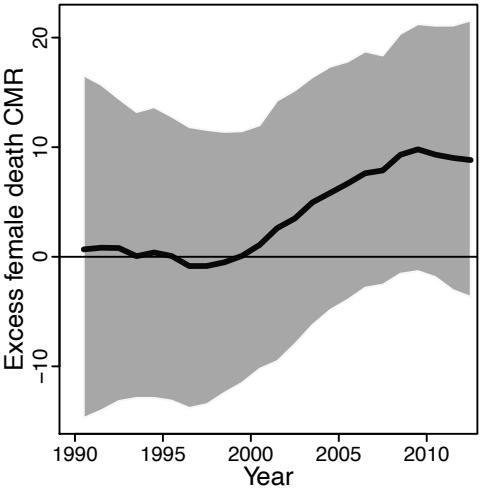
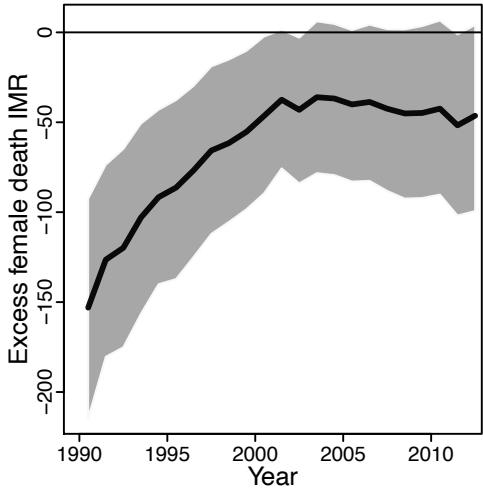
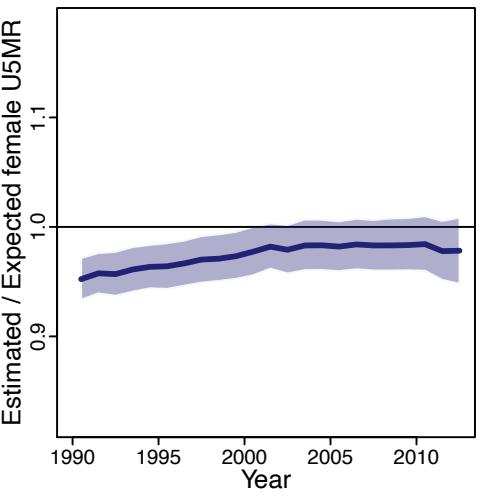
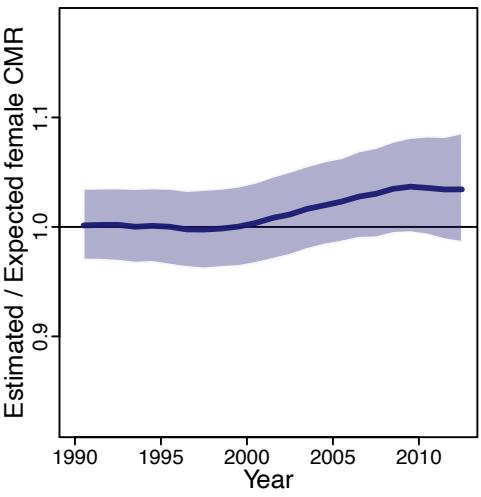
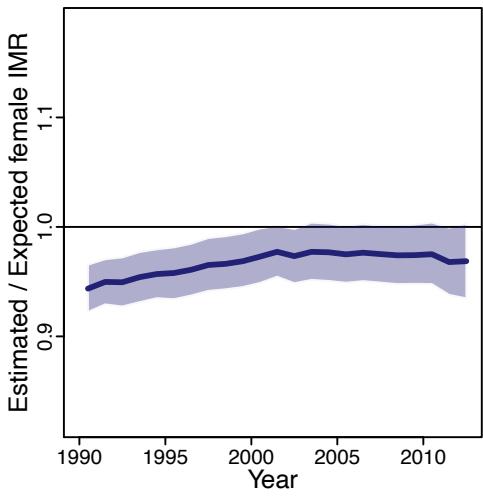
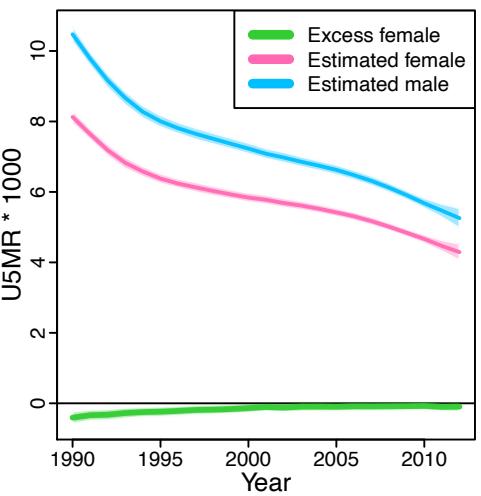
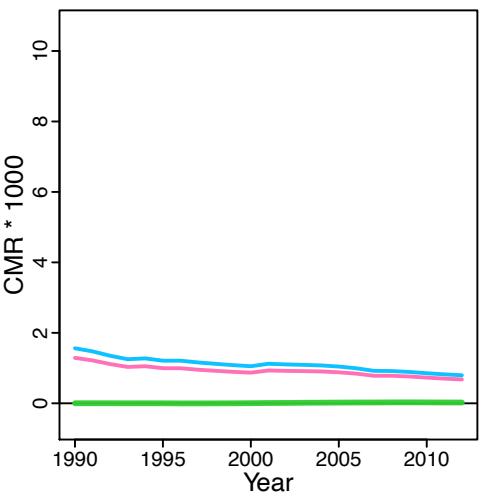
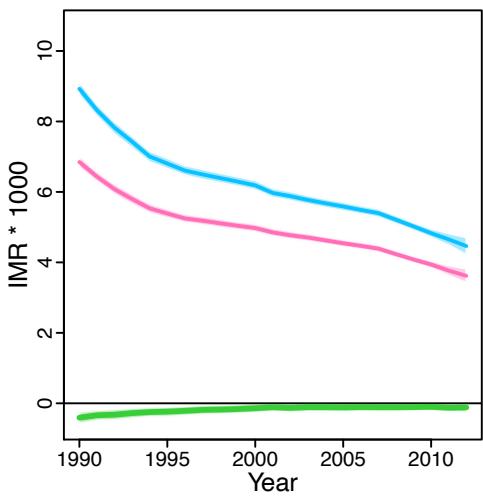
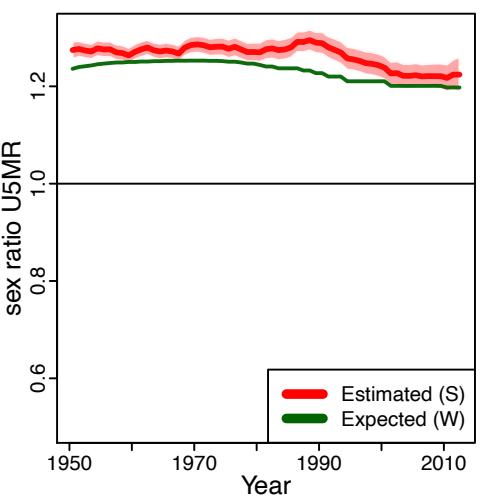
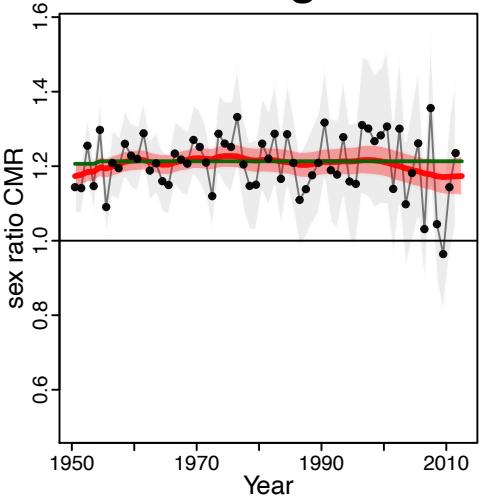
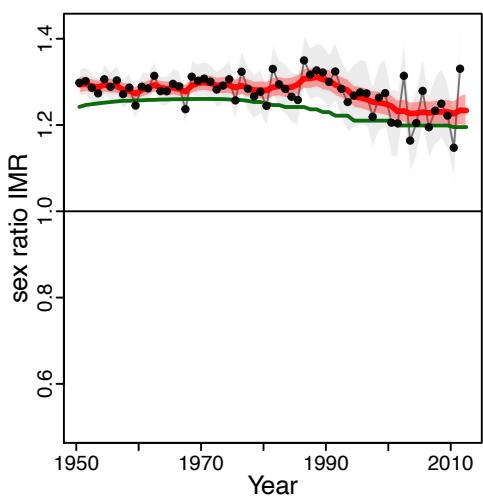
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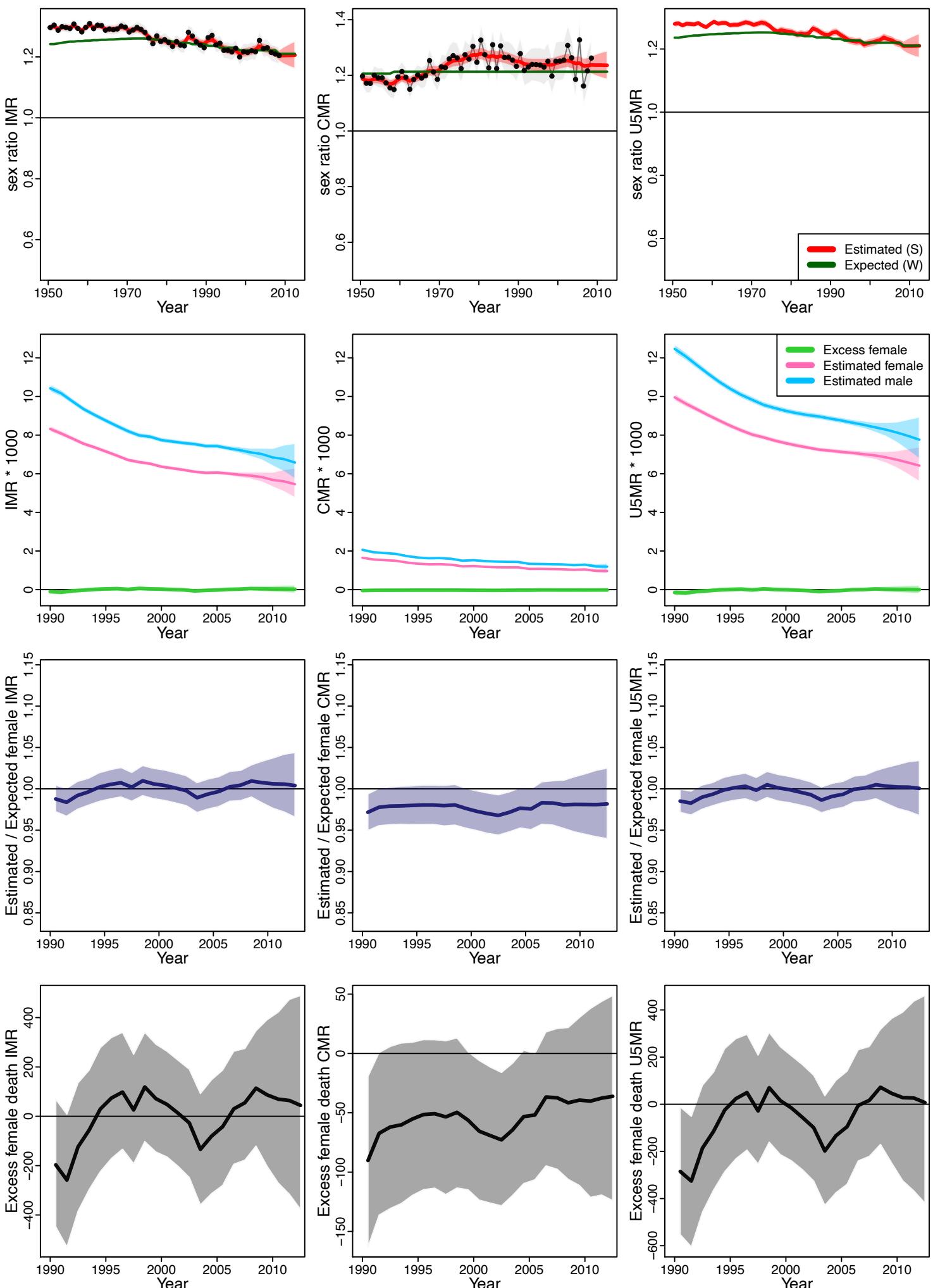
# United Arab Emirates



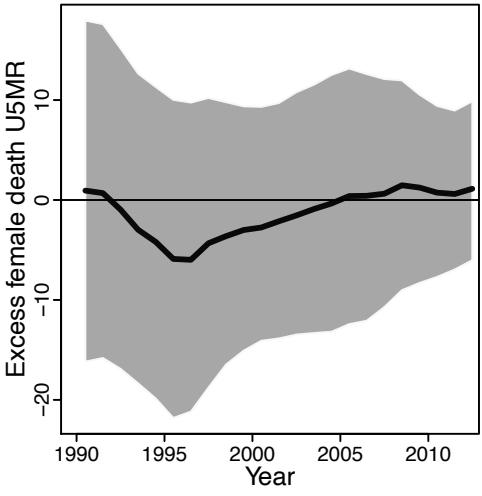
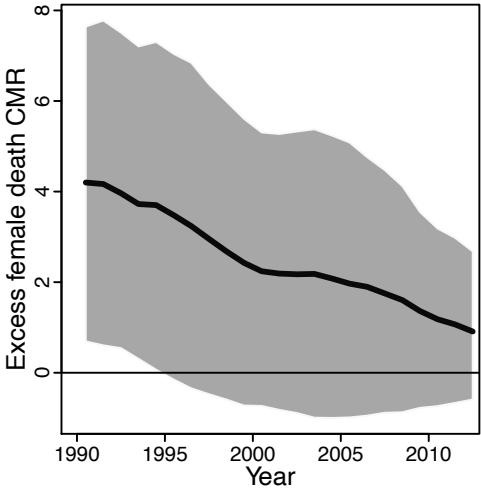
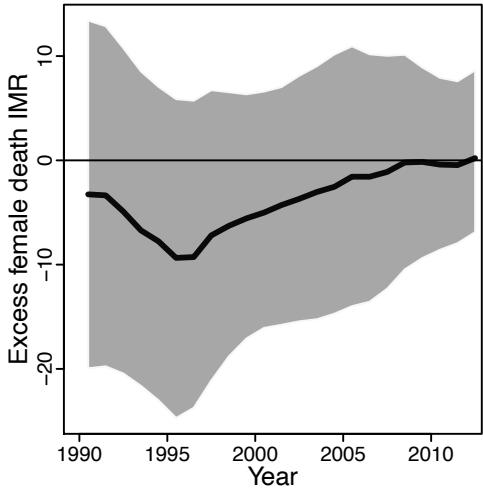
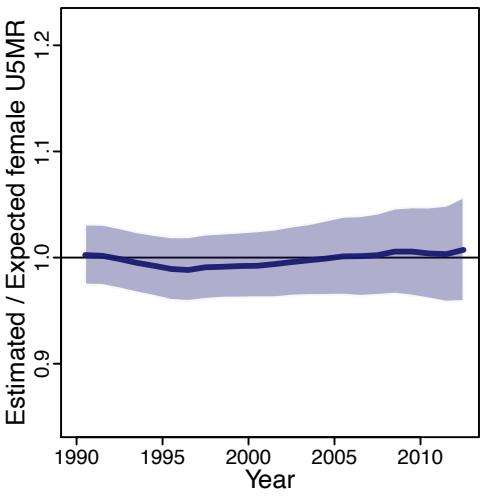
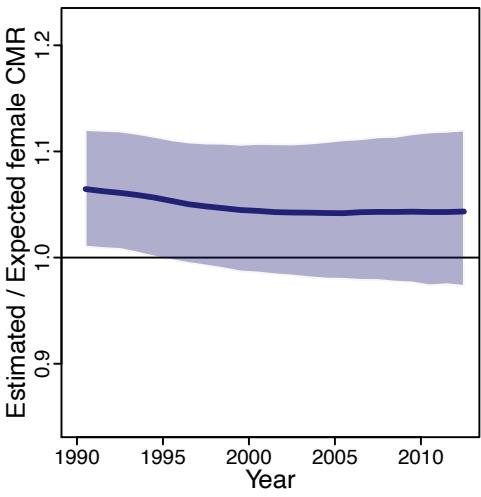
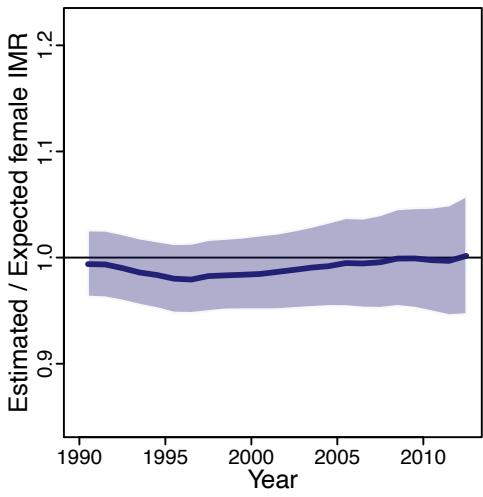
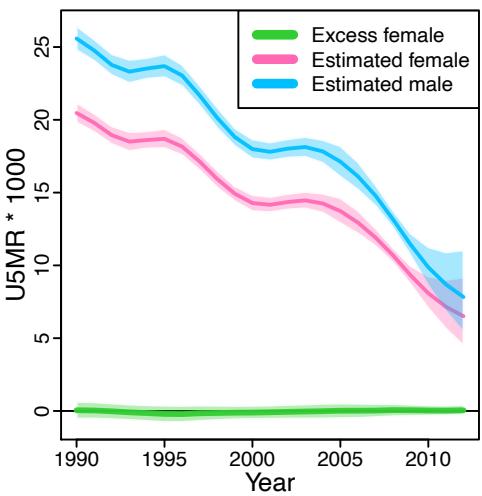
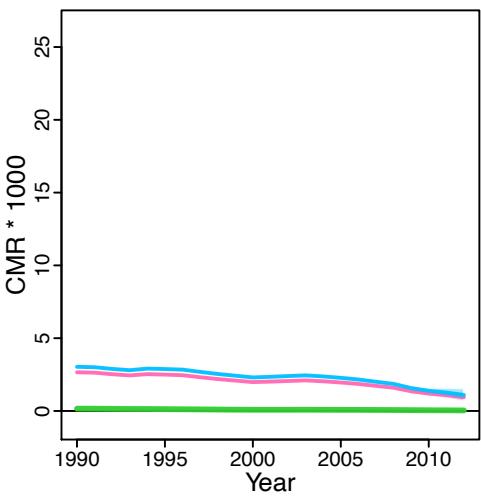
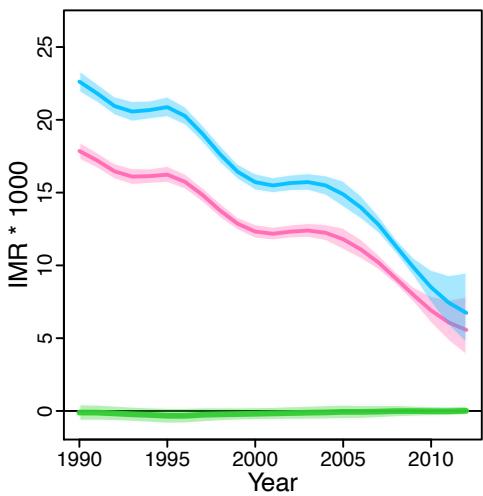
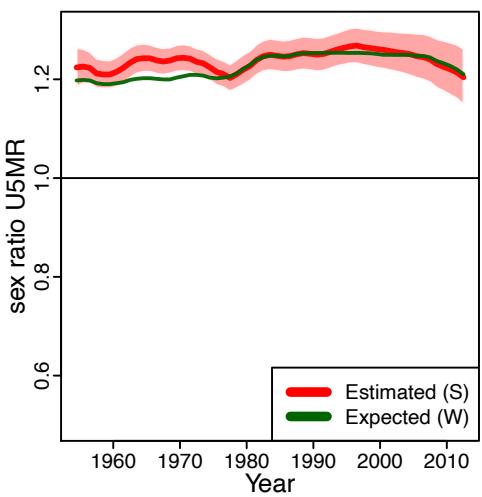
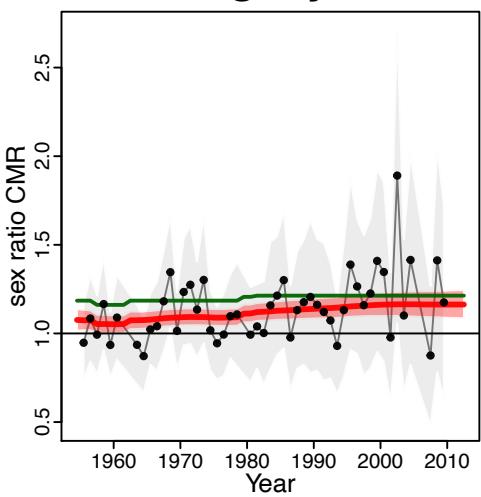
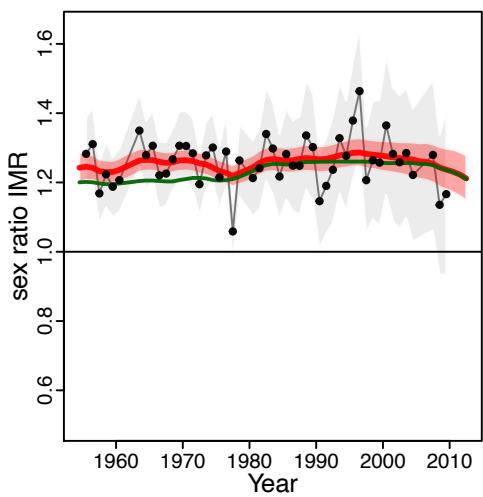
# United Kingdom



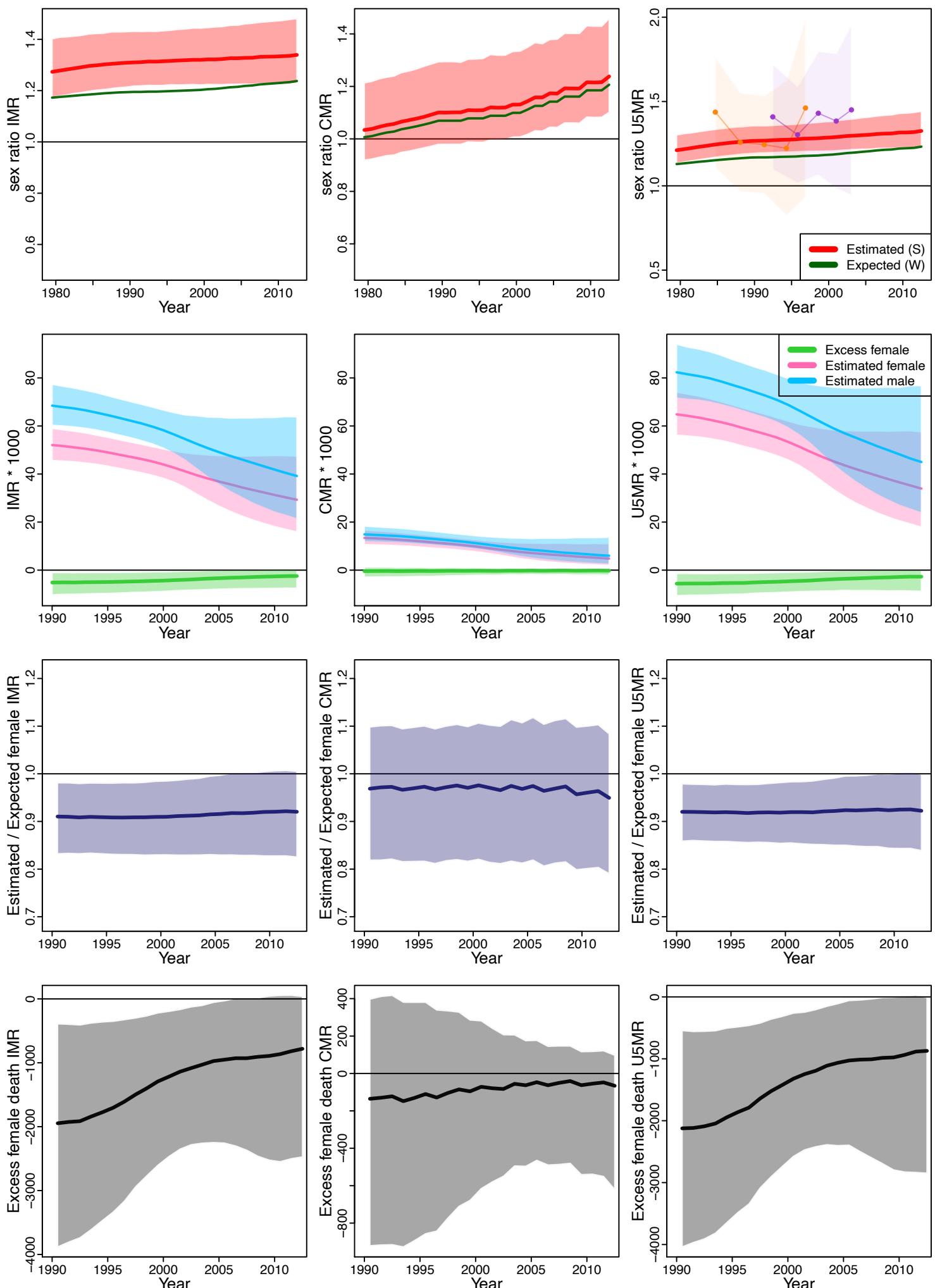
# United States of America



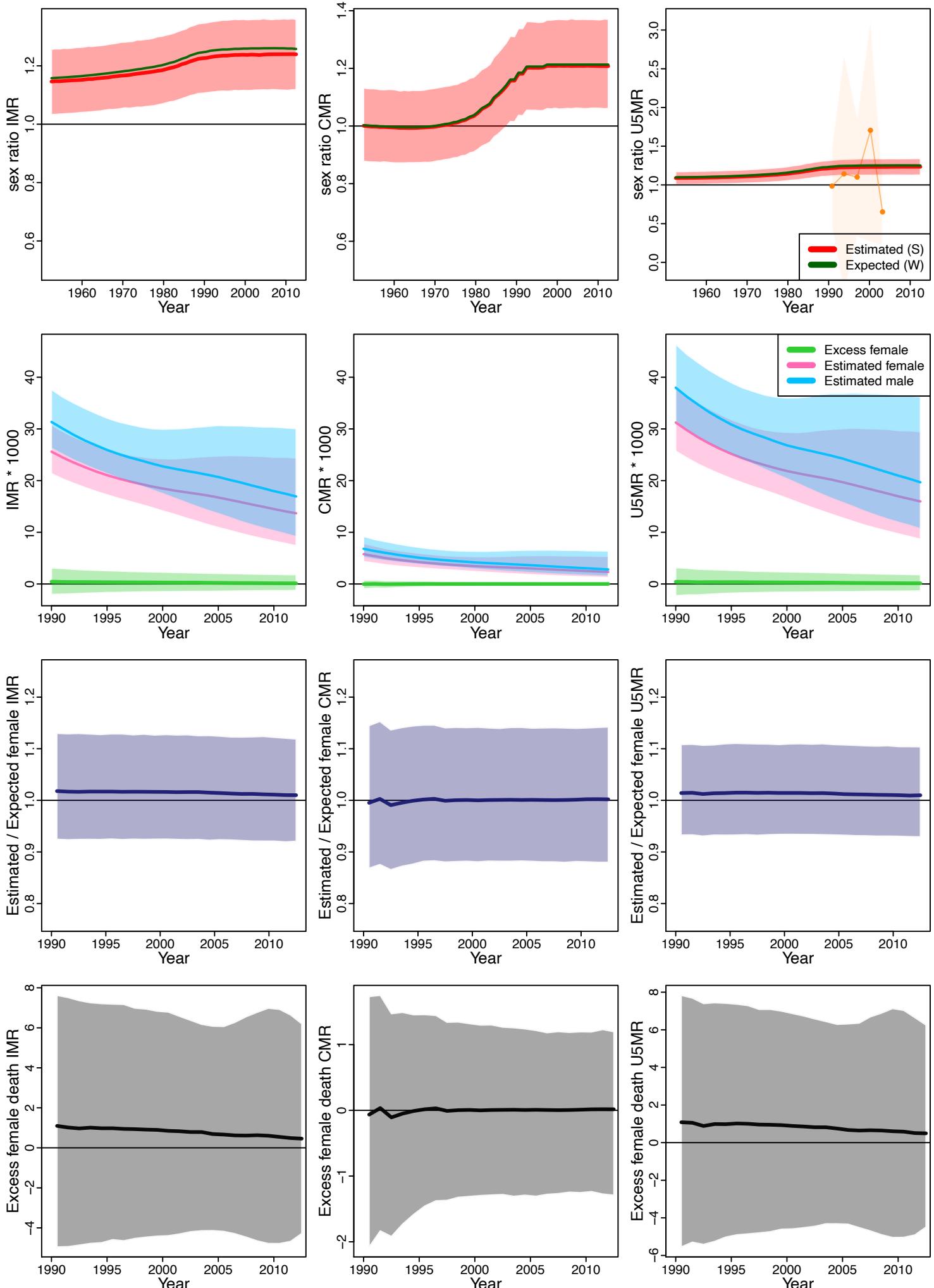
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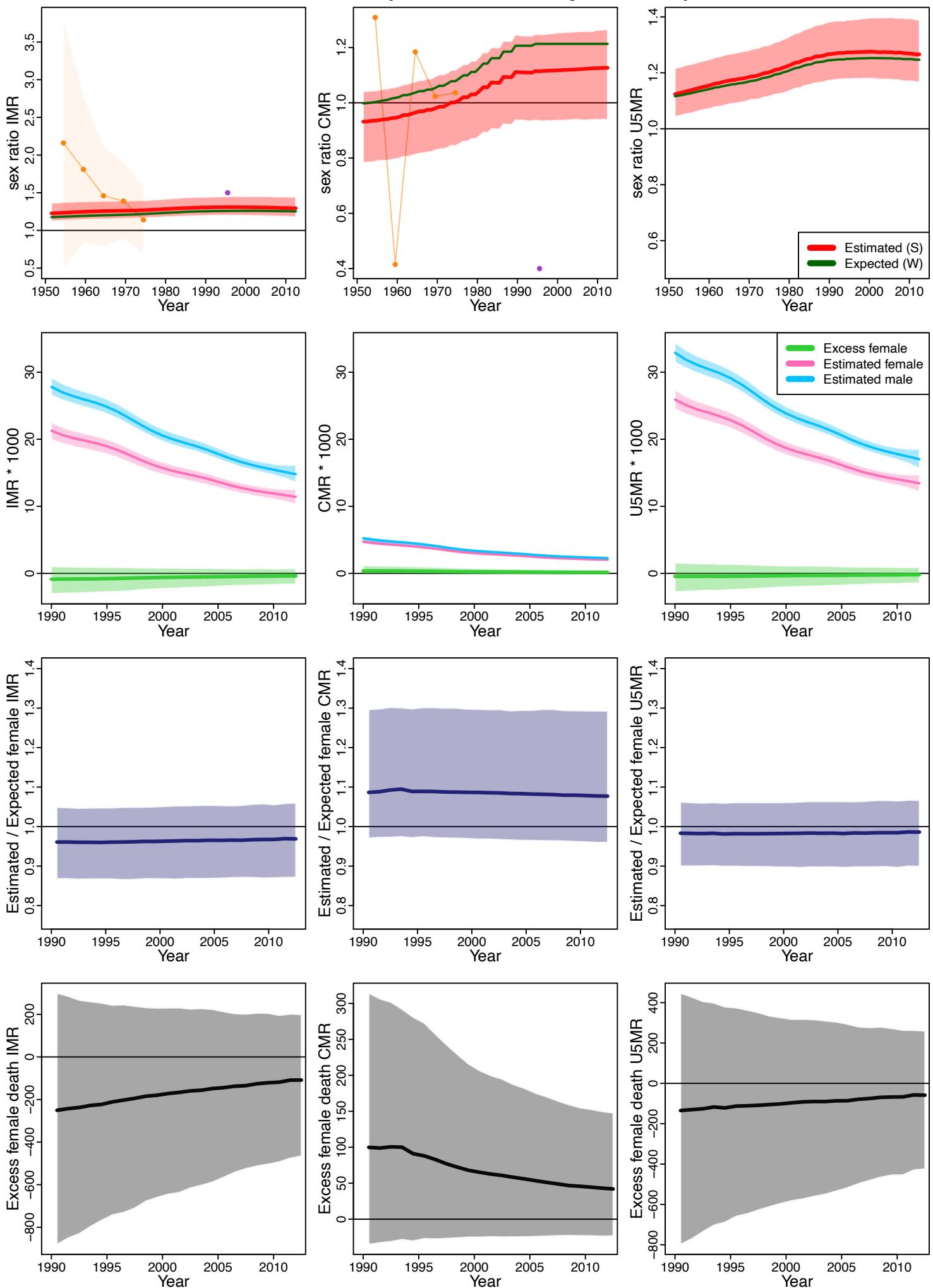
# Uzbekistan



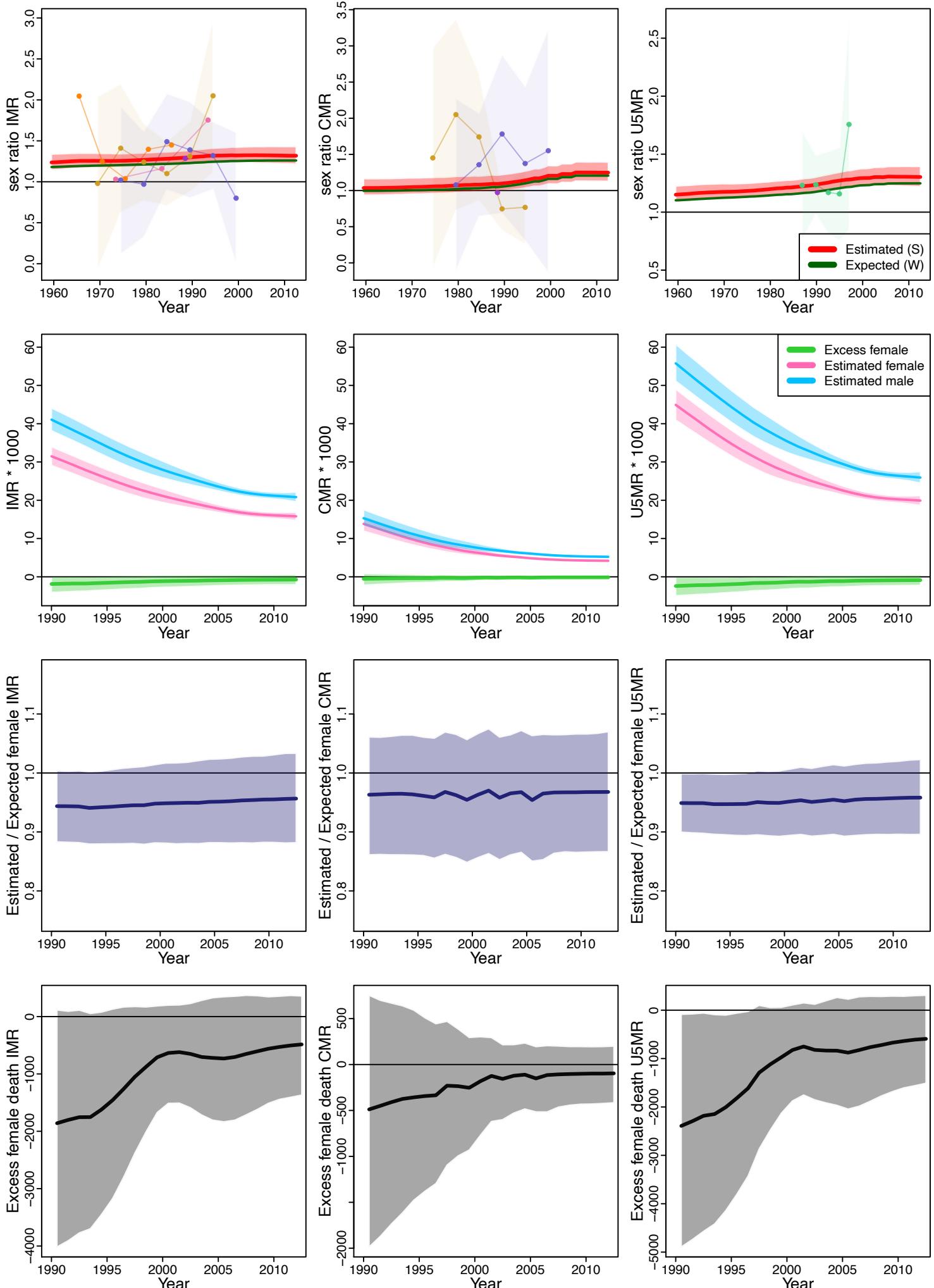
# Vanuatu



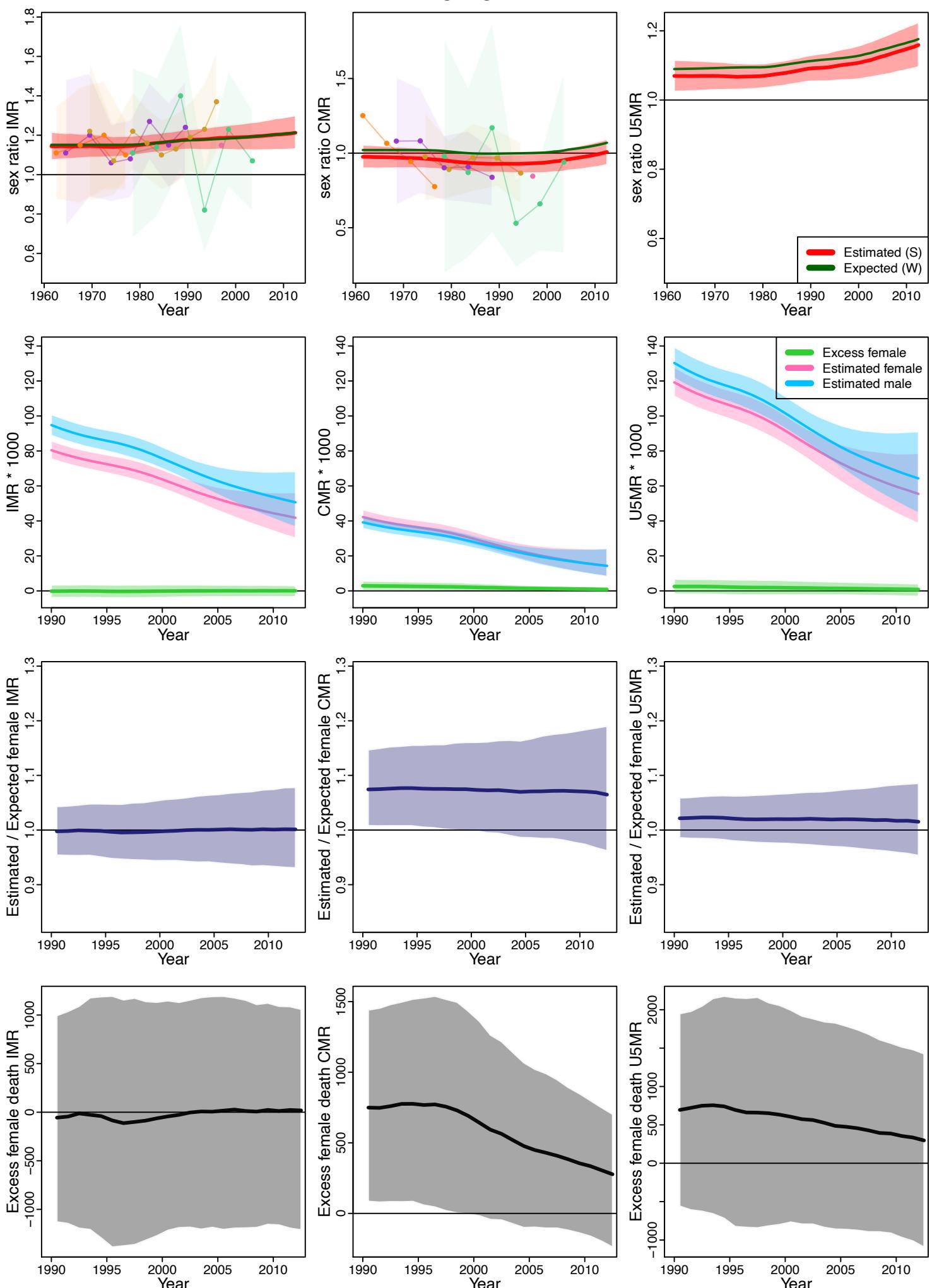
# Venezuela (Bolivarian Republic of)



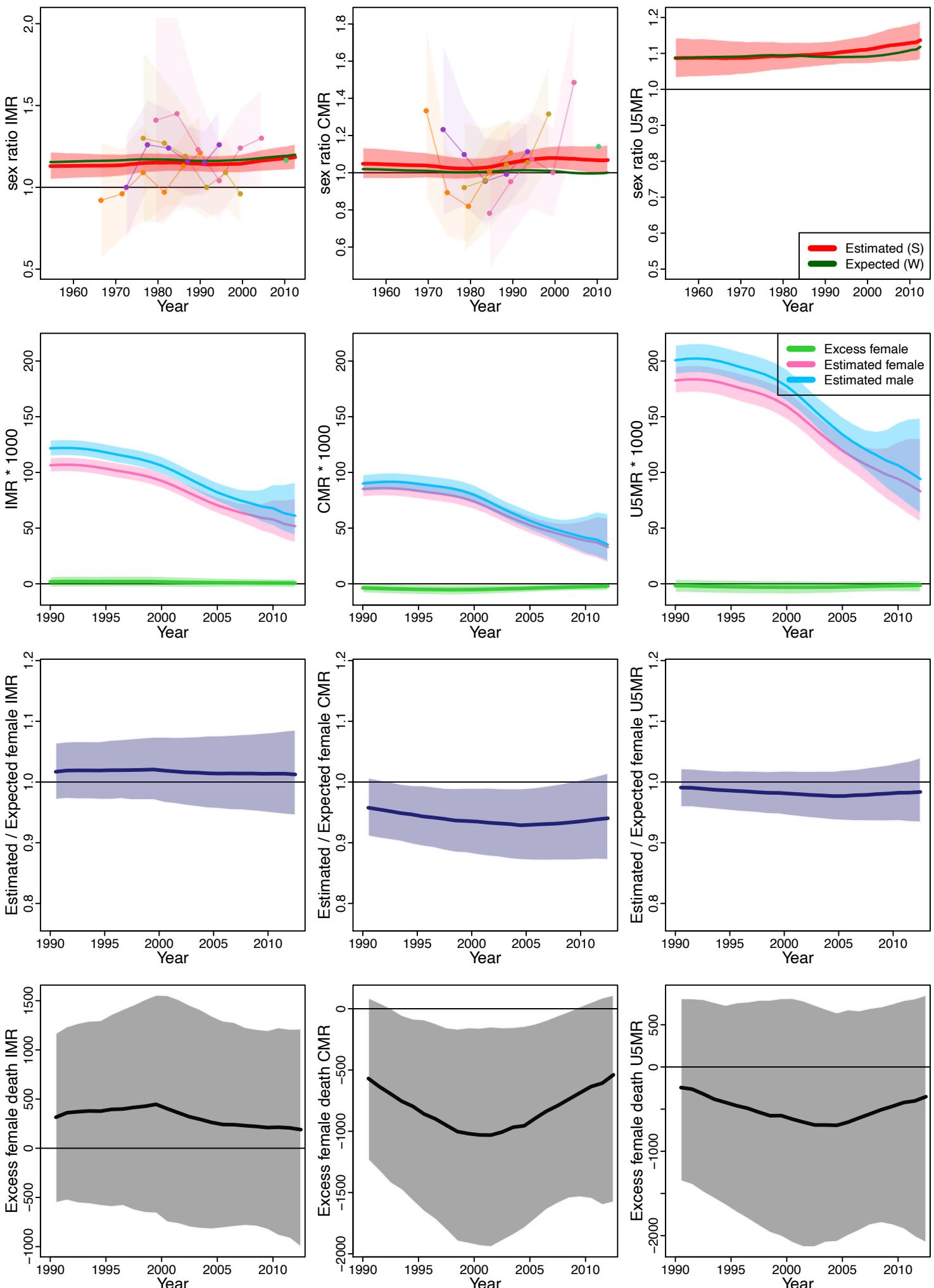
# Vietnam



# Yemen



# Zambia



# Zimbabwe

