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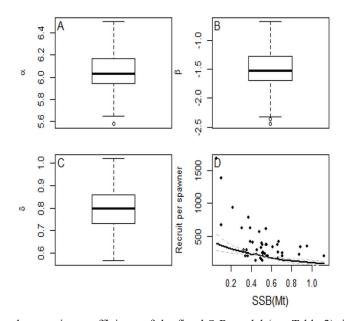


Fig. S1: Boxplot of bootstrapped regression coefficients of the fitted S-R model (see Table 2), including the intercept (A), the slope of spawning stock biomass (SSB) (B) and the fixed effect factor of assessment (C), as well as the resulting predictions of recruits-per-spawner, as well as 95% confidence intervals (grey dashed) at each level of observed SSB when back-transformed from the log-values of the linearized Ricker model.

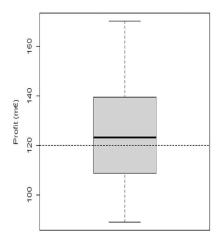


Fig. S2: Boxplot of model derived estimates of profit (m€) versus an available estimate of the mean annual revenue of the Turkish anchovy fishery from 2006 to 2010 (Goulding *et al.*, 2014; dashed line). The model simulations represent mean annual profit based on 1,000 runs using the mean fishing mortality during the corresponding time-period and randomly resampled errors of the *S-R* model as input.

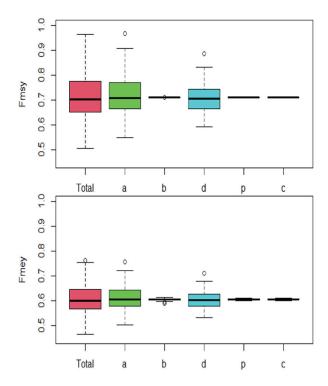


Fig. S3: Sensitivity of estimated reference points F_{msy} (top) and F_{msy} (bottom) to uncertainty in model input parameters, including each of the parameters individually and the combined global sensitivity ("Total"). The parameters a, b, d were randomly bootstrapped from the 95% CI of the fitted regression coefficients of the *S-R* model (Table 2; Fig. S1), while the economic parameters, price (p) and unit cost (c) were randomly drawn from a range representing $\pm 25\%$ of the fixed estimates (Table 1).