6 Appendix

Aggregate human capital series

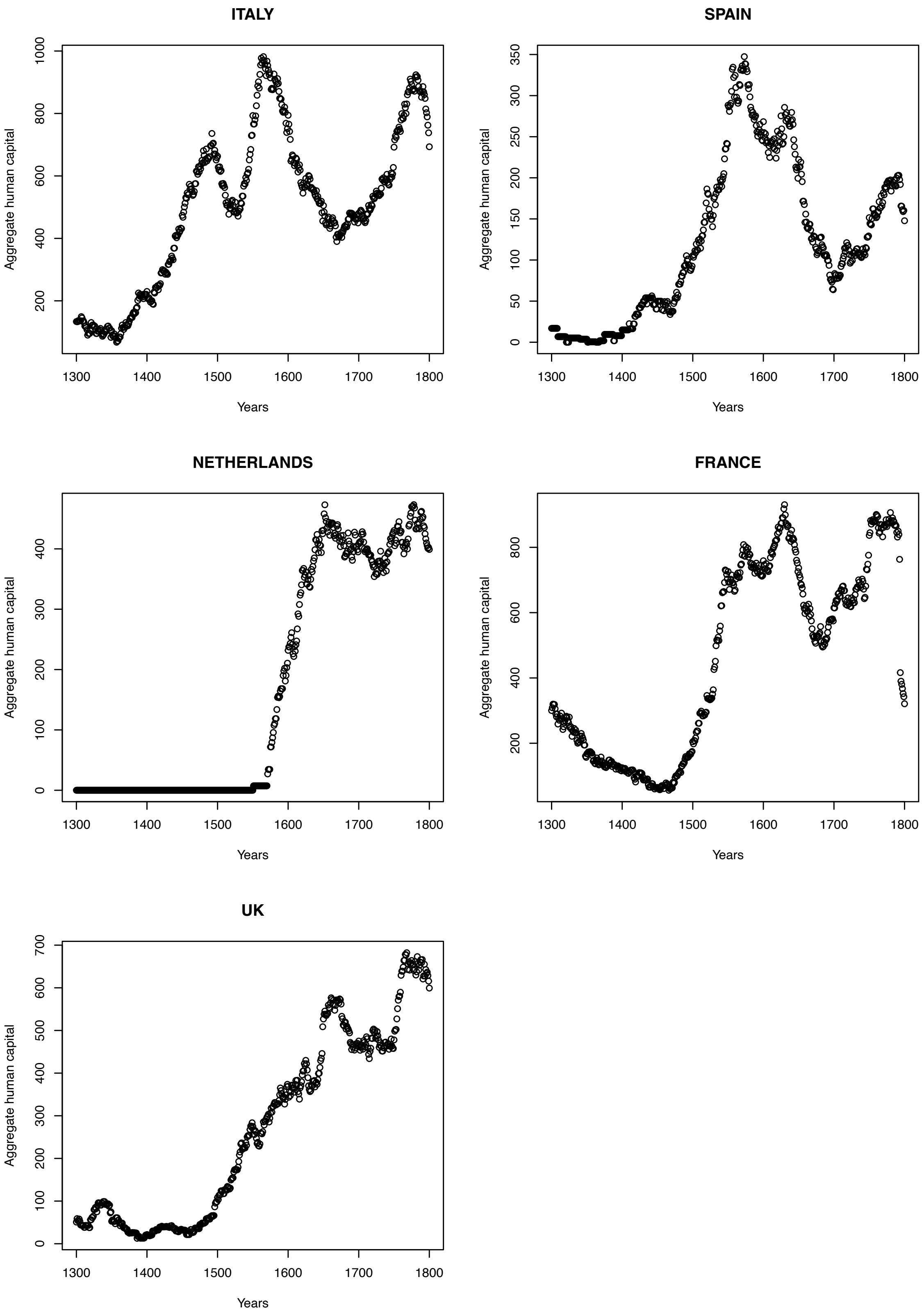

Figure 4: Human capital series from 1200 CE to 1800 CE. Source: Curtis and De la Croix (2023)

GDP series

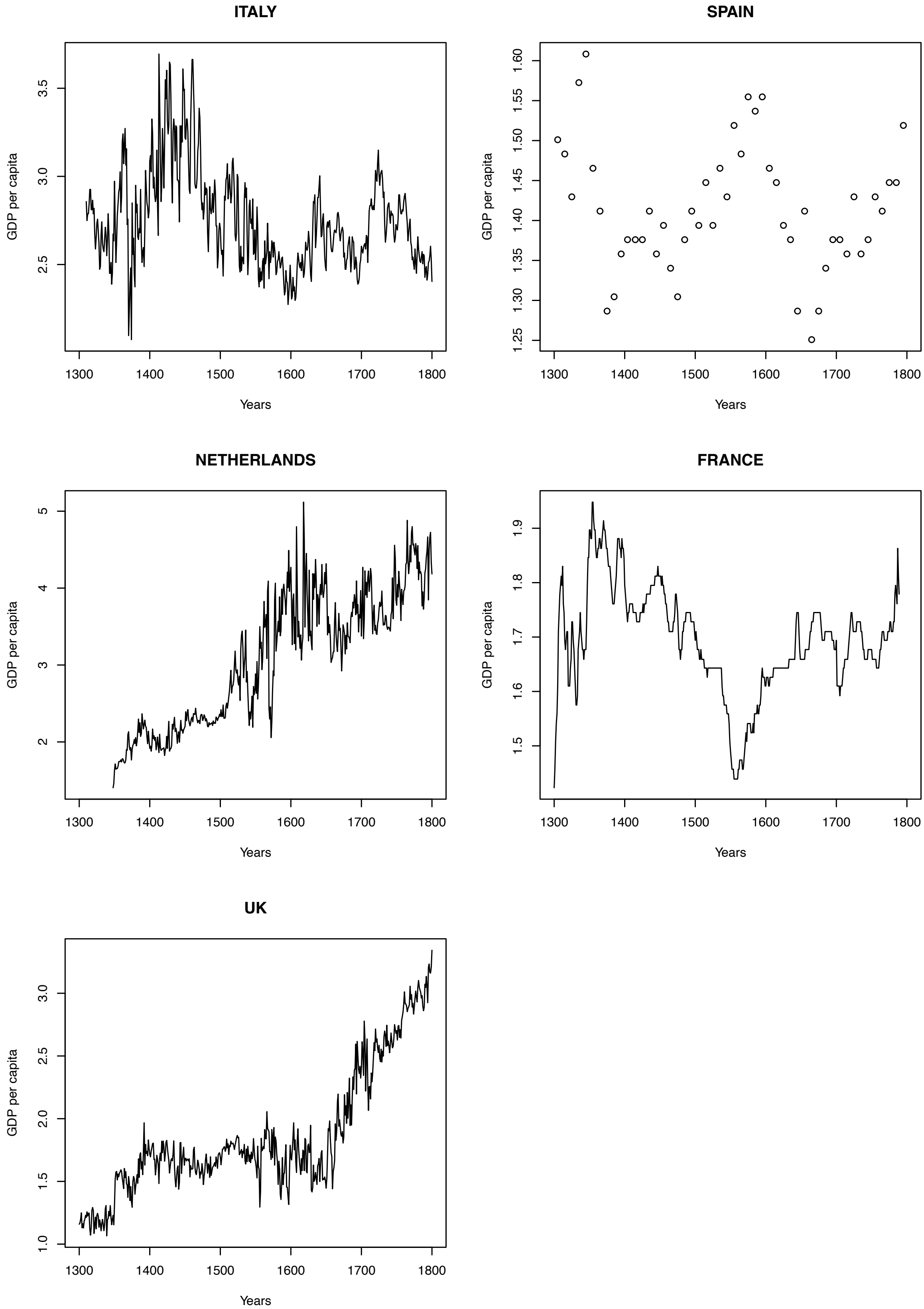

Figure 5: GDP series from 1200 CE to 1800 CE. Data in thousands of 2011 US $. Source: Bolt and Van Zanden (2020).

Fitted human capital

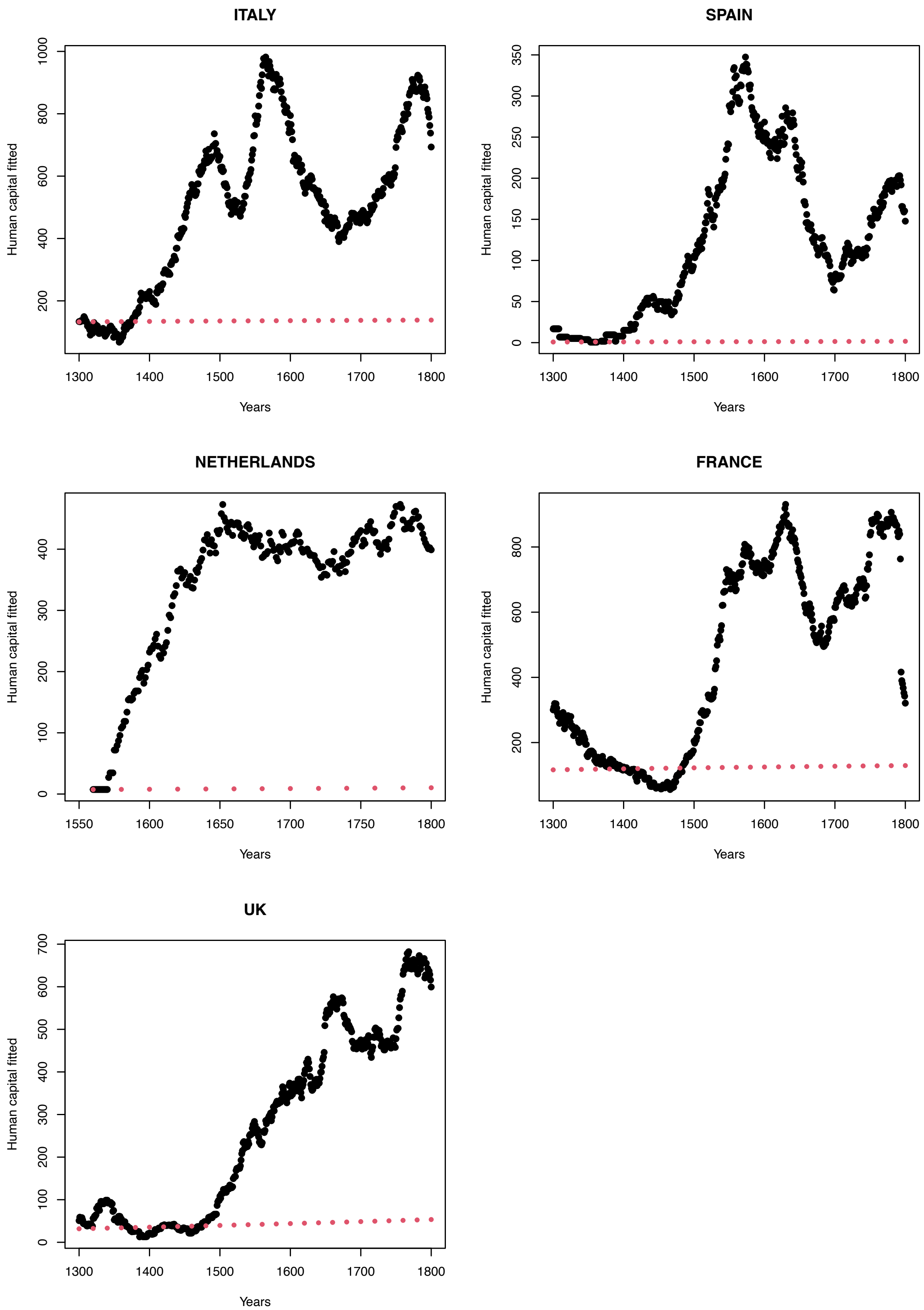

Figure 6: Fitted human capital. Data (black line), fitted human capital (red). Source: Curtis and De la Croix (2023)

Sensitivity analysis

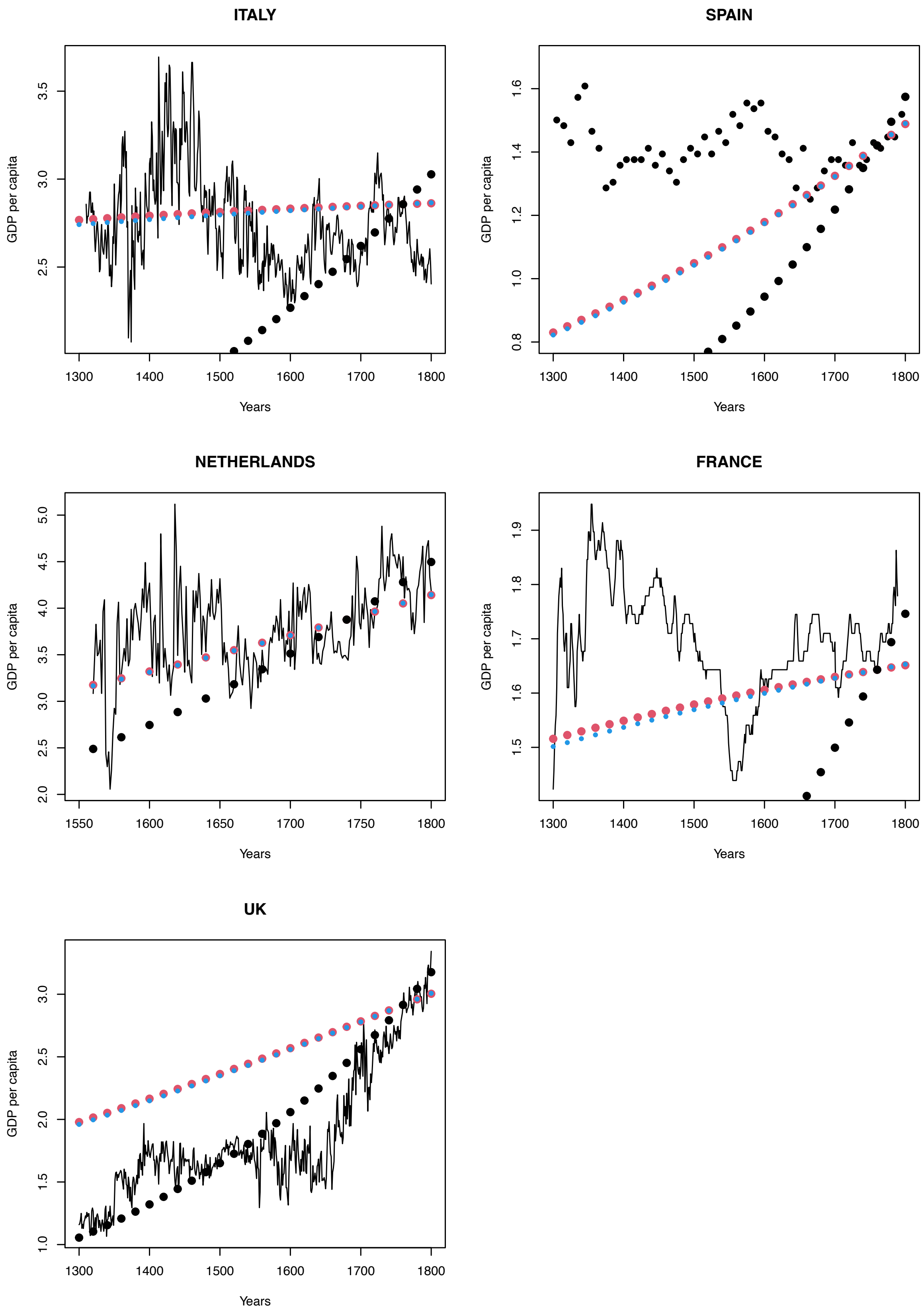

Figure 7: Sensitivity analysis. Data (black line), $\gamma = 1$ (red), $\gamma = 1,000$ (light blue), $\gamma = 1,000,000$ (black dots). Data in thousands of 2011 US \$. Source: Bolt and Van Zanden (2020)

Dynamic properties of H_t

I hereby present the algebraic derivation of the system's dynamic equation in H_t. Consider eq. (21). Exploiting the fact that both $G^{NA}_{t+1}(h_{t+1})$ and $G^{A}_{t+1}(h_{t+1})$ are uniformly distributed, it can be rewritten as:

$$H_{t+1} = (1-m_t)\frac{\bar{h}_t(2b-\bar{h}_t\mathbb{E}_t[\epsilon])\bar{\epsilon}}{8b} + m_t\frac{\bar{h}_t\bar{\epsilon}(4b-\bar{h}_t\mathbb{E}_t[\epsilon])}{8b} \tag{37}$$

By solving the above, one gets:

$$H_{t+1} = \frac{\bar{h}_t\bar{\epsilon}}{4} \tag{38}$$

Resorting to eq. (16), we can rewrite it as:

$$\bar{h}_t = \frac{\bar{h}_{t-1}\bar{\epsilon}}{4}\left[4 - \frac{\bar{h}_{t-1}\bar{\epsilon}}{4}\frac{2}{b}\right] \tag{39}$$

Which in turn implies:

$$\bar{h}_t = H_t(4 - H_t\frac{2}{b}) \tag{40}$$

Substituting the previous result in H_{t+1}, one gets:

$$H_{t+1} = H_t(4 - H_t\frac{2}{b})\frac{\bar{\epsilon}}{4} \tag{41}$$

Estimated initial conditions of H_1

	H_1
Netherlands	7.3608755
Spain	0.7839445
England (then Great Britain)	31.6946370
Italy	132.6304614
France	116.3271949

Table 2: Results of the MDE procedure. Estimated initial conditions for human capital.