

PYK - Fitted - Thinning factor 1 dnantiles 1.14 Method 1.2 - bulk 1.13 Relative ESS 9.0 8.0 9.0 tail Trace Plot 1.11 Rank Plot <u>ව</u> 0.8 6.0 ESS Relative 7 Relative I 1.10 0.2 0.0 1000 2000 500 4000 8.0 2000 4000 0 0.2 0.6 1.0 8.0 0.0 0.6 Rank (all chains) Quantile Quantile Total number of draws PYK - Fitted - Thinning factor 10 1.20 dnantiles 1.0 Method 1.2 • bulk 1.18 Relative ESS 9.0 6.1 9.0 6.1 🗕 tail Trace Plot 1.14 Rank Plot ව<u>්</u> 0.8 6.0 ESS Relative 2.0 1.12 Relative E 0.2 1.10 0.0 0.0 1000 2000 500 4000 0.2 0.6 8.0 0.2 0.6 8.0 1.0 2000 1.0 4000 0 0.0 0.4 0.0 0.4 0 Quantile Quantile Rank (all chains) Total number of draws PYK - Fitted - Thinning factor 100 dnantiles Method 1.20 1.2 • bulk 1.18 Relative ESS 9.0 6.4 • tail Lace Flot 1.16 Rank Plot ESS for 9.0 8.0 Relative 5.0 1.12 1.10 0.2 1.08 500 1000 2000 2000 4000 8.0 4000 0.2 8.0 0.0 0.2 0.6 1.0 0 0.0 0.6 1.0 Quantile Quantile Total number of draws Rank (all chains) PYK - Fitted - Thinning factor 1000 dnantiles Method 1.2 • bulk 1.12 Relative ESS 8.0 6.0 6.1 8.0 6.1 tail Trace Plot 1.11 1.10 Plot 8.0 ESS for 0.6 Relative 0.2 0.2 1.09 0.0 + 0.0 0.0 500 1000 2000 0.4 0.6 Quantile 4000 0.4 0.6 Quantile 2000 0.2 8.0 1.0 0.2 8.0 1.0 4000 0.4 0 0.0 Rank (all chains) Total number of draws

PYK - Fitted - Thinning factor 1 1.13 dnantiles Method 1.2 - bulk 1.12 Relative ESS 9.0 6.1 9.0 6.1 tail Trace Plot 1.11 Rank Plot <u>ව</u> 0.8 6.0 ESS Relative – 1.09 0.2 1.08 0.0 1000 2000 500 4000 0.6 8.0 2000 4000 0 1.0 0.2 0.6 8.0 0.2 0 0.0 Quantile Rank (all chains) Quantile Total number of draws PYK - Fitted - Thinning factor 10 dnantiles 1.0 1.14 Method 1.2 • bulk 1.13 Relative ESS 9.0 6.1 9.0 6.1 **→** tail Trace Plot 1.11 Rank Plot ව<u>්</u> 0.8 6.0 ESS Relative 0.2 Relative I 1.10 0.2 0.2 1.09 0.0 0.0 1000 2000 500 4000 0.2 0.6 8.0 1.0 0.2 0.6 8.0 1.0 2000 4000 0 0.0 0.4 0.0 0.4 Rank (all chains) Quantile Quantile Total number of draws PYK - Fitted - Thinning factor 100 1.16 dnantiles Method 1.2 • bulk 1.14 – tail Trace Plot 1.12 Rank Plot ESS for 9.0 8.0 Relative 0.4 1.08 0.0+ 0.0 0.0 500 1000 2000 8.0 4000 0.2 2000 4000 8.0 1.0 0.6 0.4 1.0 0 0 0.0 0.2 0.6 Rank (all chains) Quantile Quantile Total number of draws PYK - Fitted - Thinning factor 1000 1.13 dnantiles 1.2 1.12 Relative ESS 9.0 8.0 9.1 Trace Plot Rank Plot Method 1.10 bulk 0.2 1.09 0.0 + 0.0 0.0 500 1000 2000 4000 0.4 0.6 Quantile 0.4 0.6 Quantile 2000 0.2 8.0 1.0 0.2 8.0 1.0 0.4 4000 0 0.0 Rank (all chains) Total number of draws

PYK - Fitted - Thinning factor 1 small intervals 0.1 8.0 8.0 1.125 duantiles 1.0 Method 1.2 - bulk 1.120 tail 1.115 e 1.110 1.105 Rank Plot <u>ප්</u> 0.8 ا 0.6 و 8.0 ESS ESS 0.4 Relative 2.0 Relative 2.0 0.0 2.0 2.0 1.100 0.2 0.2 1.095 0.0 1000 500 2000 4000 0.2 0.6 8.0 4000 2000 1.0 8.0 1.0 0.0 0.6 0.0 Rank (all chains) Quantile Quantile Total number of draws PYK - Fitted - Thinning factor 10 small intervals 0.1 8.0 8.0 dnantiles 1.2 Method 1.2 • bulk 1.12 Relative ESS 9.0 8.0 9.1 🗕 tail Trace Plot Rank Plot 8.0 و و 0.6 آ 8.0 ESS ESS O O F. Relative 7.0 2.0 2.0 1.10 Relative F 0.2 0.0 1000 2000 500 4000 0.2 0.6 1.0 0.2 0.6 8.0 1.0 2000 4000 8.0 0 0.0 0.0 0.4 0.4 0 Quantile Quantile Rank (all chains) Total number of draws PYK - Fitted - Thinning factor 100 small intervals 0.1 8.0 8.0 1.14 dnantiles 1.0 Method 1.2 • bulk 1.13 Relative ESS 9.0 0.0 9.0 0.1 • tail Trace Plot - 11.1 -Rank Plot ම් 0.8 ر أو 0.6 6.0 ESS Relative 0.4 1.10 0.2 0.2 Relat 1.09 1000 2000 500 0.0 2000 4000 4000 0.0 8.0 1.0 0.2 0.6 8.0 1.0 0.2 Rank (all chains) Quantile Quantile Total number of draws PYK - Fitted - Thinning factor 1000 small intervals 0.1 8.0 8.0 1.20 dnantiles 1.0 Method 1.2 1.18 bulk Relative ESS 0.0 0.0 0.0 0.1 0.0 0.0 0.1 1.16 Bot 1.14 Bot 1.12 Rank Plot 8.0 ල් of 0.6 6.0 ESS Relative ESS f Relative F 1.10 0.2 1.08 0.0 + 0.0 0.0 500 1000 2000 0.4 0.6 Quantile 0.4 0.6 Quantile 0.2 1.0 0.2 1.0 2000 4000 4000 8.0 0.4 8.0 0.4 Total number of draws Rank (all chains)

PYK - Fitted - Thinning factor 1 small intervals 0.0 8.0 duantiles 1.0 Method 1.2 • bulk 1.26 tail ± 1.24 e ∃ 1.22 ± 1.22 Rank Plot و 0.8 tor 6.0 ESS 0.6 ESS 0.4 Relative – 0.4 Relative I 0.2 1.20 0.0 1000 2000 500 4000 8.0 4000 1.0 2000 0 0.6 8.0 1.0 0.0 0.0 Rank (all chains) Quantile Quantile Total number of draws PYK - Fitted - Thinning factor 10 small intervals 0.1 2.0 8.0 dnantiles 1.2 Method 1.325 1.2 • bulk Relative ESS 9.0 8.0 9.1 1.300 **→** tail 1.275 ey 1.275 1.250 Rank Plot 8.0 و رم _{0.6} ا 6.0 ESS SS3 0.4 Relative 7.0 2.0 2.0 Relative F 1.225 0.2 1.200 0.0 0.0 1000 500 2000 4000 8.0 1.0 0.2 1.0 2000 4000 0.2 0.6 0.6 8.0 0 0.0 0.0 0.4 0.4 Quantile Quantile Rank (all chains) Total number of draws PYK - Fitted - Thinning factor 100 small intervals 0.1 8.0 1.27 dnantiles 1.0 Method 1.2 1.26 • bulk Relative ESS 9.0 0.0 9.0 0.1 tail 1.25 9 1.24 1.23 Rank Plot <u>ල</u> 0.8 ر o و 0.6 6.0 ESS Relative ESS 1 0 0 0 0 0 0 0 0 1.22 0.2 1.21 500 1000 2000 4000 2000 4000 0.0 8.0 1.0 0.2 0.6 0.0 8.0 1.0 0.2 0.6 Rank (all chains) Quantile Quantile Total number of draws PYK - Fitted - Thinning factor 1000 small intervals 0.0 8.0 duantiles 1.0 Method 1.250 1.2 bulk 1.225 ഗ 1.0 1.229 O 1.200 1.175 Rank Plot 8.0 و و 0.6 0.6 Relative ESS f Relative 1.150 0.2 0.2 1.125 0.0 + 0.0 0.0 1000 2000 0.4 0.6 Quantile 1.0 2000 4000 500 0.2 8.0 1.0 0.2 0.6 8.0 4000 0.4 0 0.4 Rank (all chains) Quantile Total number of draws