

Table 1 Sufficient Conditions for Nondegenerate[‡] Solution

| Consumption Model(s) | Conditions | Comments |
|--|---|---|
| $\bar{c}(m)$: PF Unconstrained $\underline{c}(m) = \underline{\kappa}m$ Section 2.4.2: Section 2.4.2: Eq (26): Eq (27): | RIC, FHWC [°] | RIC $\Rightarrow v(m) < \infty$; FHWC $\Rightarrow 0 < v(m) $ PF model with no human wealth ($h = 0$) RIC prevents $\bar{c}(m) = \underline{c}(m) = 0$ FHWC prevents $\bar{c}(m) = \infty$ PF-FVAC+FHWC \Rightarrow RIC GIC+FHWC \Rightarrow PF-FVAC |
| $\dot{c}(m)$: PF Constrained Section 2.4.3: Appendix A: Appendix A: | $\mathcal{GH}\mathcal{C}$, RIC GIC, RIC GIC, $\mathcal{RH}\mathcal{C}$ | FHWC holds ($\Gamma < \mathbf{D} < \mathbf{R} \Rightarrow \Gamma < \mathbf{R}$) $\dot{c}(m) = \bar{c}(m)$ for $m > m_{\#} < 1$ ($\mathcal{RH}\mathcal{C}$ would yield $m_{\#} = 0$ so $\dot{c}(m) = 0$) $\lim_{m \rightarrow \infty} \dot{c}(m) = \bar{c}(m)$, $\lim_{m \rightarrow \infty} \dot{\kappa}(m) = \underline{\kappa}$ kinks where horizon to $b = 0$ changes* $\lim_{m \rightarrow \infty} \dot{\kappa}(m) = 0$ kinks where horizon to $b = 0$ changes* |
| $c(m)$: Friedman/Muth Section 2.9: Section 2.11.1: Figure 3: Section 2.11.3: Section 2.11.2: Section 3.3: Section 3.3.2: Section 3.3.1: | Section 3.1, Section 3.2 FVAC, WRIC | $\underline{c}(m) < c(m) < \bar{c}(m)$ $\underline{v}(m) < v(m) < \bar{v}(m)$ Sufficient for Contraction WRIC is weaker than RIC FVAC is stronger than PF-FVAC $\mathcal{FHWC} + \text{RIC} \Rightarrow \text{GIC}$, $\lim_{m \rightarrow \infty} \kappa(m) = \underline{\kappa}$ $\mathcal{RH}\mathcal{C} \Rightarrow \mathcal{FHWC}$, $\lim_{m \rightarrow \infty} \kappa(m) = 0$ “Buffer Stock Saving” Conditions GIC $\Rightarrow \exists \quad 0 < \check{m} < \infty$ GIC-Nrm $\Rightarrow \exists \quad 0 < \hat{m} < \infty$ |

[‡]For feasible m satisfying $0 < m < \infty$, a nondegenerate limiting consumption function defines a unique optimal value of c satisfying $0 < c(m) < \infty$; a nondegenerate limiting value function defines a corresponding unique value of $- \infty < v(m) < 0$. [°]RIC, FHWC are necessary as well as sufficient for the perfect foresight case. ^{*}That is, the first kink point in $c(m)$ is $m_{\#}$ s.t. for $m < m_{\#}$ the constraint will bind now, while for $m > m_{\#}$ the constraint will bind one period in the future. The second kink point corresponds to the m where the constraint will bind two periods in the future, etc. ^{**}In the Friedman/Muth model, the RIC+FHWC are sufficient, but *not* necessary for nondegeneracy